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PLASTER BALUSTRADES FROM KHIRBAT AL MAFJAR

IN Volume VI of the *Quarterly*, pp. 162, 163, 164, and 167, and in Volume X, p. 158, Mr. D. C. Baramki reported the discovery of fragments of carved plaster screens belonging to balustrades which had enclosed the upper galleries of the porticoes which surrounded the central courtyard of the palace and flanked the gate tower in front. The bulk of the fragments were found in the actual ruins of the galleries, but some were also found in certain of the rooms opening off the central courtyard, including two nearly complete panels which were illustrated on Plates LVIII and LIX of Volume VI. These two panels were still in the sculptors' hands when the building was abandoned.

The fragments of these balustrades filled several large cases and caused us to hope that a fair number of the panels and of the posts which supported them might be restored in the Museum. It proved, however, that not only had the screens been smashed to pieces in the fall of the building but much of their substance had since disappeared, either by disintegration in the soil or in the disturbance caused by stone quarriers. In the result less than half a dozen posts and panels have proved capable of reassembly without an unreasonable proportion of new plaster.

The drawings reproduced in Figs. 3–32 and 39–50 are restorations of the designs based on surviving fragments of each panel. In most cases the fragments were too scanty to be arranged for photography in such a way as to give a clear impression of the patterns they formed. On the other hand, the accuracy of the geometrical layout, and the sculptors' consistent adherence to certain rules of design, made it possible to recover from the fragments the design of nearly every screen.[1]

The panels comprise two separate groups, belonging to the galleries of the forecourt and to the central cloisters respectively. The panels from the forecourt were all pierced with an openwork arcaded design; this design was the same throughout the series, but the borders which surrounded it differed from panel to panel. The panels in the central cloisters were not pierced, but were carved with different designs on each face.

[1] But not necessarily its correct relation to the field or to the surrounding border. This, of course, depended on finding fragments which not only showed portions of the field pattern and border together, but could also be identified as belonging to the top or bottom, right or left edges as the case might be. Similarly, the dimensions of the panel in some cases could only be calculated from the scale of the border scrolls, and then only if the fragments could be located with certainty as belonging to the sides or to the top or bottom borders. Although these conditions were not in every case fulfilled, we believe that the drawings, generally speaking, give the correct relation of the pattern to the edges of the panel and, where the full height of the panel is represented, the correct vertical dimension; the horizontal dimension is sometimes more problematic. Since many of the reconstructions are based on fragments of two duplicate panels (p. 4 below), the drawings cannot indicate how much, nor, as a rule, which parts of a given panel survive. But generally that half or quarter of a panel was drawn which was best represented by the fragments. In the restoration of the patterns everything which we regard as certain has been shaded against a hatched background; conjectural parts have been left in outline.

All the drawings are the work of Dr. Albert Henschel, to whose careful observation and unflagging interest the recovery of many sadly mutilated designs is due. Photographs of a selection of the fragments are given in the plates. Of these, Plates I–XVII are from the central court; XVIII and XIX a panel from the forecourt made up from fragments; XX and XXI border fragments; and XXIII a very small selection of characteristic details shown in perspective to a larger scale.

The dimensions of the panels were governed by the intercolumnar spaces they had to fill, and these were probably never quite constant. In the central courtyard the distance from one column to the next was about 4·85 m., and this was filled by three panels and four posts to support them, for a post was always applied to the side of each column. The width of the posts and panels varied, but the panels from the central court averaged about 1·50 m. long (including a portion embedded in the posts) and 1·10 m. high. The space to be filled in the forecourt galleries was about 4·35 m., and for this two panels and three posts were used. The panels came out at about 2·10 m. long (including the embedded margins) and 1·12 m. high (Fig. 1).

Both panels and posts were made of gypsum plaster.[1] The posts varied in width from 19 cm. to 29 cm. Their height may have averaged about 1·40 m. Each post was built up with a reinforcement of brick fragments; in one case this consisted of bricks measuring about $21 \times 11 \times 4\frac{1}{2}$ cm. set on end vertically; in others much smaller pieces were laid above each other horizontally between layers of plaster. Sometimes lumps of previously hardened plaster were used instead of bricks; occasionally fragments of unsuccessful or discarded panels.

Posts which rested against a column were rounded to the curved surface of the shaft and to the base mouldings. This shows that they were built up in position, not brought ready made from the workshop. The procedure seems to have been to place the reinforcing bricks close against the column and then throw or press the soft plaster round them. We have no evidence that any sort of shuttering was necessary. The panels and posts were fixed together in the same way. Finger marks visible in certain fragments of posts which have bits of panel sticking in them show that the posts were built up with soft plaster round the edges of the panels, which must have been set up in position when hard with gaps of about 10 cm. between them; brick fragments and plaster would have been pushed into the gaps as the posts grew.

Each post was capped with a bulbous knob, usually grooved round its maximum diameter. This was marked off from the shaft either by a moulded neck or by a moulded neck resting on a square base, as shown in Figs. 1 and 2. The knob and its base were

[1] The material of all the screens is the same. Chemical analysis of one sample by Mr. J. H. Haleblian gave the following result:

Calcium sulphate (Gypsum, $CaSO_4$)	72·35 per cent.
Calcium carbonate ($CaCO_3$)	4·73 „
Oxides of iron and aluminium	1·74 „
Hydrochloric insolubles (impure silica)	0·03 „
Loss on drying (at 100°–120° C.)	18·30 „
Loss on ignition	2·44 „
	99·59 „

Chlorides, less than 0·005 per cent.

This differs from the Mesopotamian plaster described by Debevoise in *American Journal of Archaeology*, Vol. XLV, p. 48, in containing calcium carbonate and a comparatively negligible amount of silica.

It differs from the Egyptian samples analysed by Lucas, *Ancient Egyptian Materials and Industries*, 2nd. ed., 1934, pp. 415, 416, in containing no sand.

The quantity of calcium carbonate present in the Mafjar plaster represents an admixture of about 2·65 per cent. of lime in the original gypsum. This may be no more than a natural impurity.

made separately from the rest of the post and applied to it when half dry, for the joint between them is clearly visible and a number of knobs were found apparently ready made, in one of the rooms of the palace. Still, the plaster cannot have been quite hard, for where a knob rested against a column the impression of the shaft remains clear and clean upon it. Some of the knobs with their bases were built up round lumps of hardened plaster with a carved ornament; although ultimately used only as cores, these lumps must

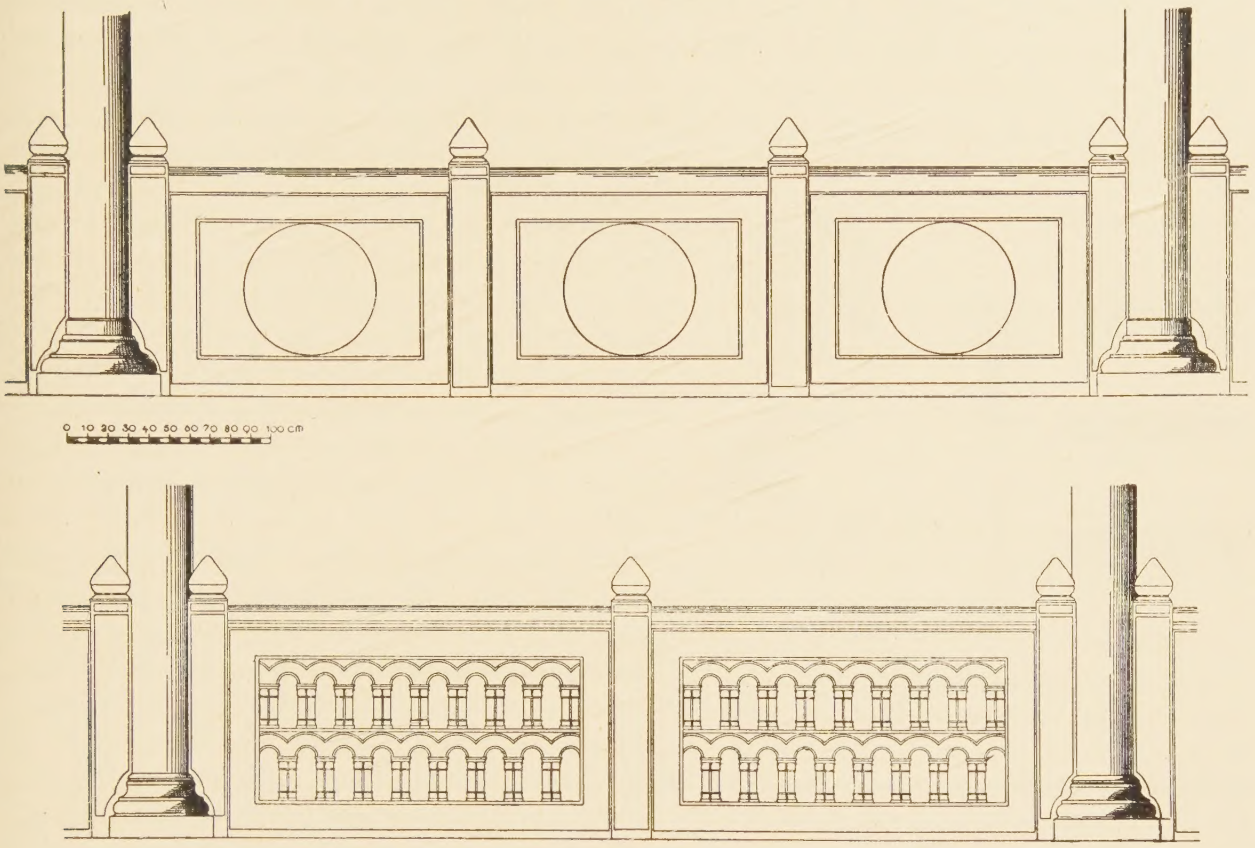


FIG. 1. Balustrades, *above*, from the Central Court; *below*, from the Forecourt

have been intended originally to be seen. An example is shown in Fig. 2 (*b*). The top surface is flattened off and countersunk with a circular depression, in the bottom of which there is a peg-hole. This inner core was made in two halves, keyed together by a fluted conical projection from the lower. Fig. 2 (*b*) shows in plan and elevation the result of (1) removing a half-section of the encasing knob and base; (2) removing the right-hand quadrant from the top half of the exposed inner core.

The panels were made from slabs of gypsum 10 to 11 cm. thick and carved on both sides. The slabs were normally prepared in one piece and at one time, but in some cases a perceptible junction in the thickness, parallel to the plane of the surface, shows that a first pouring of liquid plaster had been allowed to harden slightly before the full quantity was poured into the form. In one case a discarded screen of the arcaded type had been immersed in fresh plaster and used for carving a panel for the central

court.[1] Otherwise the material of the panels is homogeneous and without any form of internal reinforcement.

As reported in Volume VI, p. 162, two panels, one of them half finished, the other nearly complete, were found together in one of the rooms of the palace which was evidently being used as a workshop. This throws some light on the process of manufacture. It shows, firstly, that the panels, unlike the posts, were fully completed and carved before being installed in position. The fragments of most of the other panels were so distributed round the ruins of the court and in the forecourt as to suggest that they had already been taken to the places for which they were intended. A few were found in certain other rooms of the palace, where they may have been stored temporarily. In any case, finished panels were not allowed to accumulate in the workshop, but were removed as soon as the sculptors had done with them. The fact that only two panels were being worked on in this particular room suggests that the craftsmen engaged on the job were few, perhaps only a master and an assistant. The posts, carved *in situ*, may have been given to a different team.

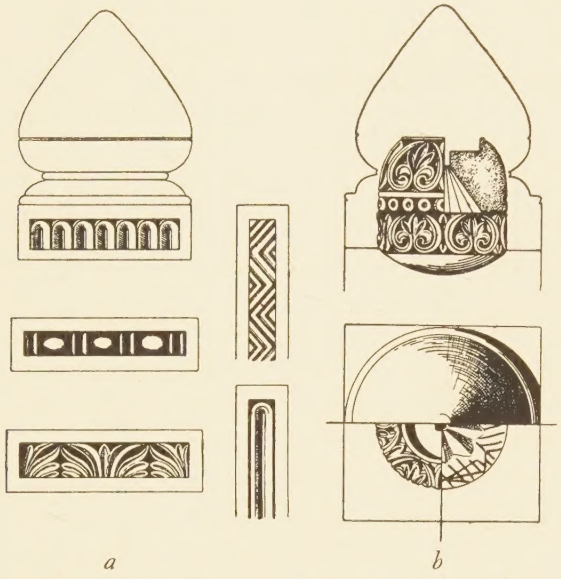


FIG. 2. (*a*) Ornamental details. (*b*) Sections through knobs

The designs on the two faces of each panel were different. The panels found in the workshop were duplicates of each other, and coincidences amongst the fragments of the rest lead us to surmise that every panel was accompanied by a twin, with the same pair of designs, sometimes in mirror reverse. This would have been an economy in labour, for if the master and his assistants could handle two panels at a time the work would go faster and with fewer mistakes if at any given moment their attentions were concentrated on a single design. We have so far detected only one design that was repeated more than once.[2]

The decorated surface of each panel was surrounded by a plain margin from 5 to 8 cm. wide. Except for 1 cm. the whole width of these margins was embedded in the posts or in a sort of rounded plaster coping which protected the tops of the panels (Fig. 39, p. 32). The bottom margin, of equal width, was probably meant to be sunk in the floor.

In every case the decoration comprised a rectangular central panel with a surrounding border separated from it by a narrow fillet. The central panel varied in size, but as far as we can judge from the fragments the most usual length in the screens from the central court was 1·12 m. with an average height of 0·68 m. The width of the border was about

[1] Panel 2 (Fig. 13 and Plate I).

[2] The design of panel 1 recurs with slight modification on panel 14 (Figs. 10 and 12, pp. 11 and 13). The reverse patterns are unrelated to each other.

14 cm. The pierced design of the screens from the façade porticoes composed a panel 1·63 m. in length and 0·74 m. in height.

The background of the non-pierced designs was excavated to a depth which varied from 1·5 to 3 cm. The pattern thus stood up clear against a background in deep shadow, as suggested by Dr. Henschel's drawings. The top surfaces were never left flat, but were modelled to varying inclined planes. The walls were generally vertical, but bevelled near the top to meet the plane of the surface at an acute angle, giving a sharp definition to the outline. The bands forming the geometrical elements and the stems of most of the floral motifs were divided lengthwise by one or two V-shaped grooves. The veins of leaves and flower petals were indicated by open V-shaped grooves, the axes being sometimes accentuated by a central furrow ending in a drilled pocket.

The Designs

Our account of the designs is divided into four sections: I. The designs of the panels from the central court; II. The pierced design used in the forecourt; III. The border patterns in both groups; IV. The decoration of the posts.

I. *Panels from Central Court.* In Figs. 3–32 we reproduce drawings of those designs which could be restored from the fragments found in or near the central court of the palace.[1] Since the designs on opposite sides of a screen bore no special relation to each other, we have not kept them together in the figures, but have grouped these by classes to help in the discussion of the patterns. The half-tone plates show the two faces of each panel together or consecutively. (Vide index at the end of the report, p. 58.)

The designs fall into two main categories. In the first the field is covered by an endless repeating pattern (Figs. 3–27); in the second the centre of the panel is occupied by a self-contained concentric design large enough to touch the top and bottom borders, while the ends and corners are filled by independent floral or semi-floral compositions (Figs. 28–31). Panel 10A (Fig. 32) is a unique variant of this class, showing two circular designs inscribed side by side within the field.

The repeating patterns generally take the form of a geometrical framework with independent floral or other motifs filling the compartments; a small minority of patterns are purely geometrical. In the mixed designs, which form the larger group, the compartments are generally filled with a quasi-floral motif (Figs. 3, 4, 5, 8, &c.); but in some cases (Figs. 7, 17, 18, and 21) this is replaced by a geometrical figure, usually a swastika, which forms a sort of appendage or elaboration of the framework.[2]

At least five different types of geometrical structures are used for the repeating patterns. The first and simplest consists of a framework of round, square, or lobed compartments

[1] Cf. Plates I–XVII.

[2] Figs. 18 and 21 differ from Figs. 16 and 20 only in the fillings of their compartments; these contain swastikas grafted, as it were, on the geometrical framework in a manner which breaks the normal rule that straps may not fork nor come to an end except at the edges of the panel. In contrast with these swastikas we may note that the knotted figures in panel 2A (Fig. 17), which fill the compartments in a geometrical scheme almost identical with Fig. 16, develop correctly from the strapwork. Fig. 6 is another example of interpolated swastikas, and is to be compared with Fig. 7, where they are worked correctly into the general scheme.

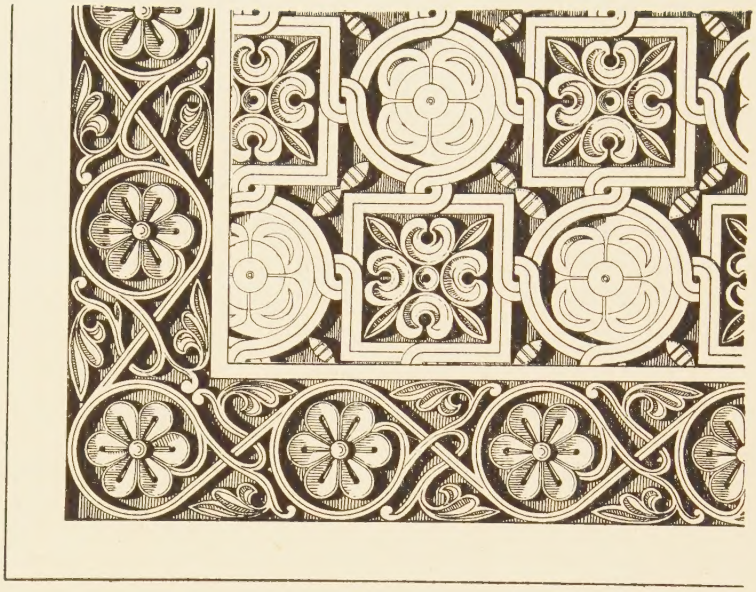


FIG. 3. Panel 7A

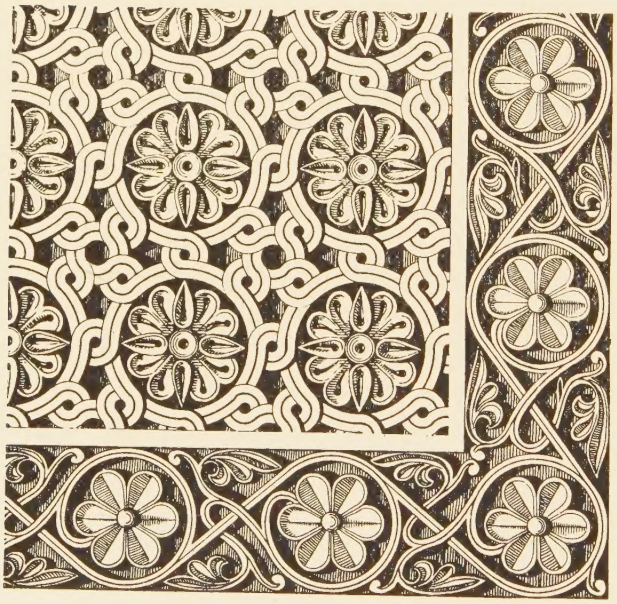


FIG. 4. Panel 12A

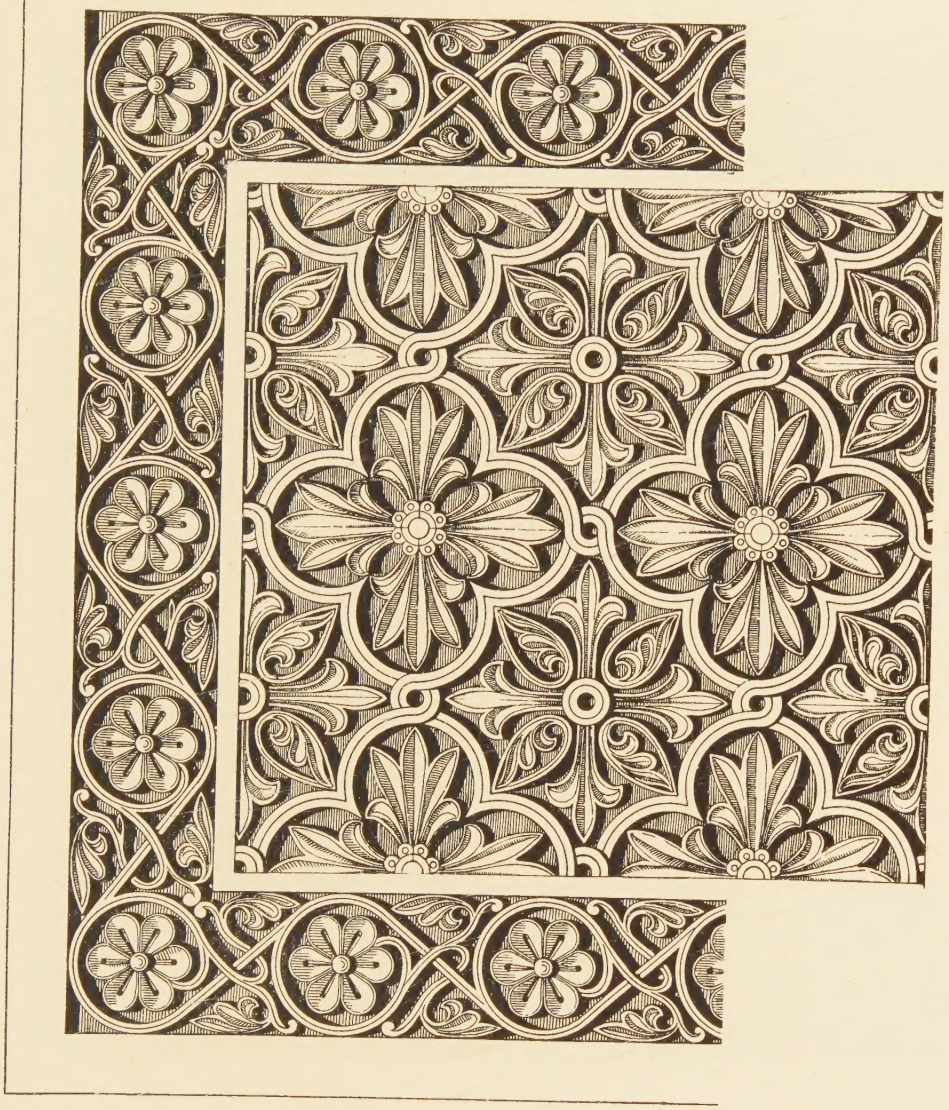


FIG. 5. Panel 5A

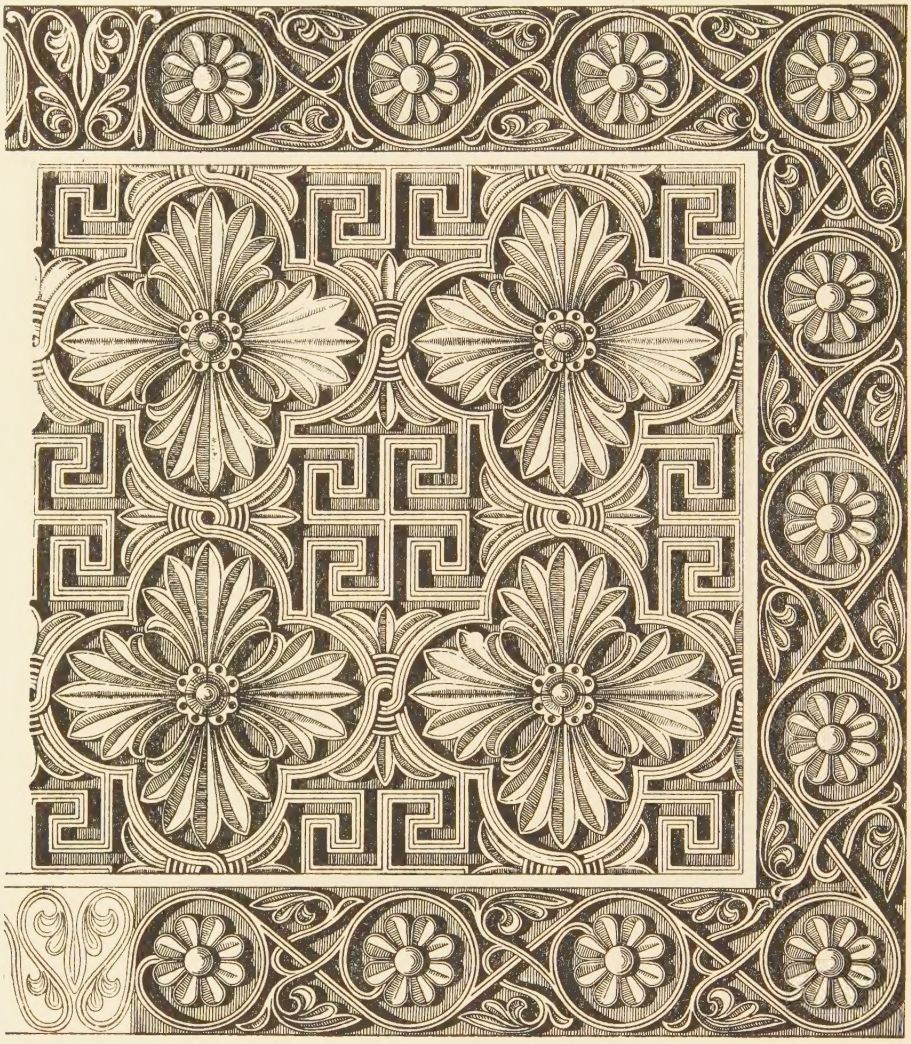


Fig. 6. Panel 13A

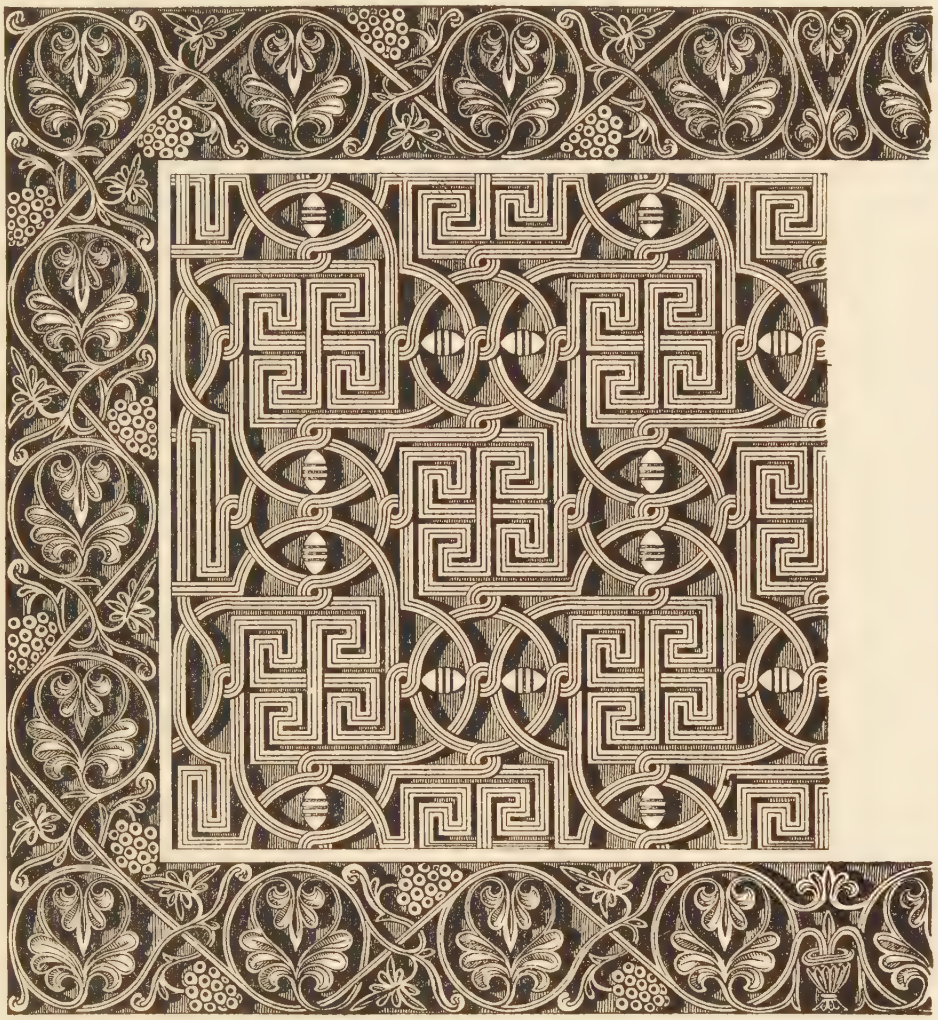


Fig. 7. Panel 15

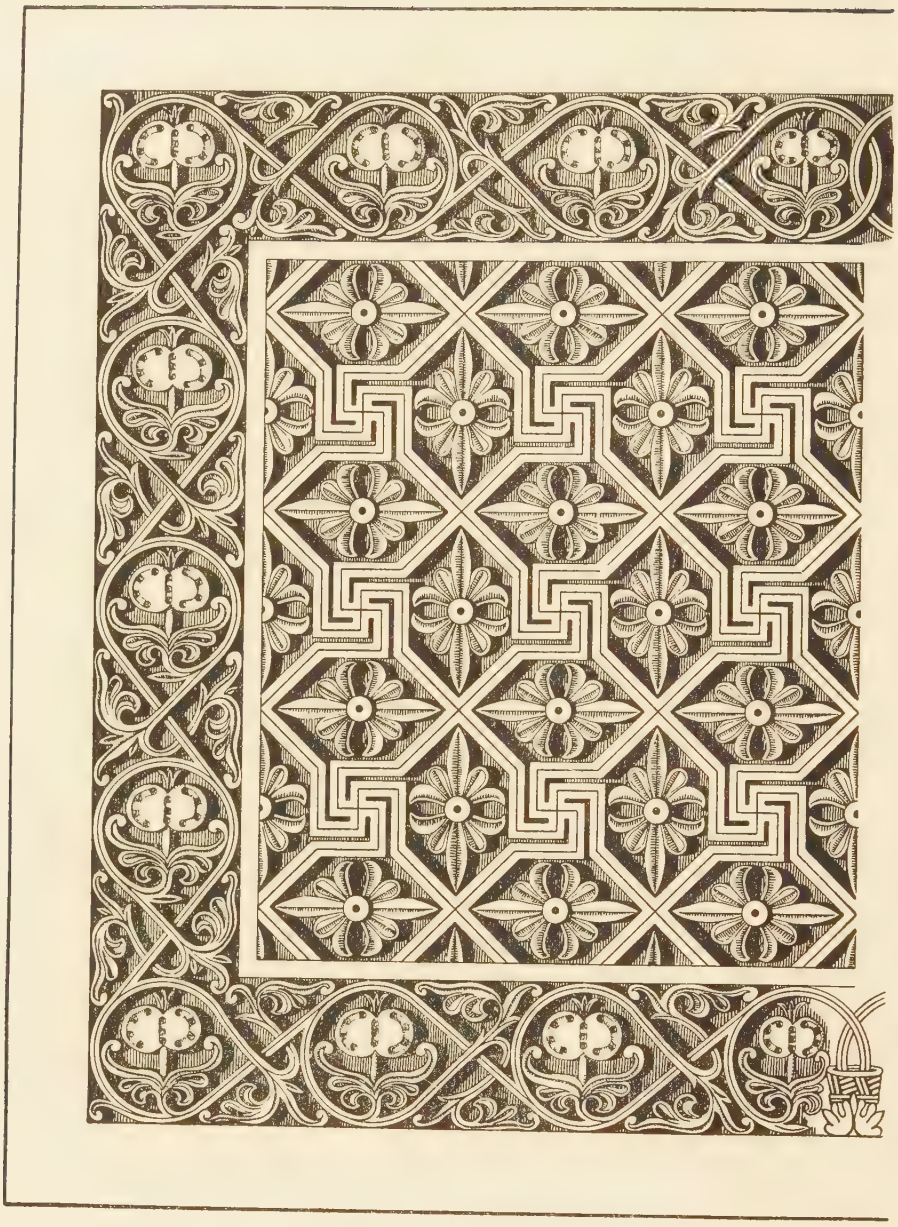


Fig. 8. Panel 8

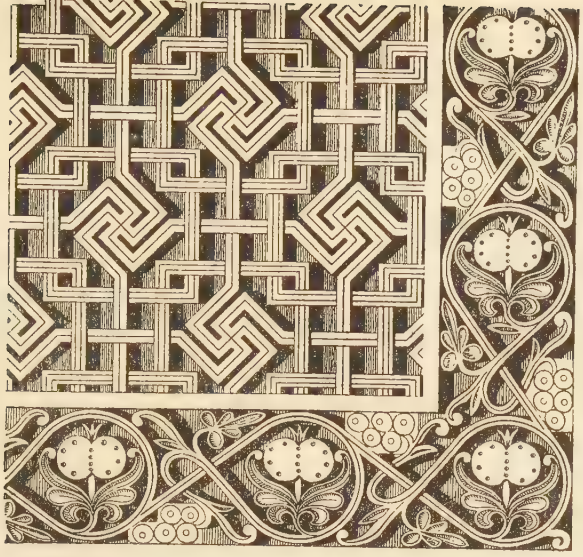


FIG. 9.
Panel 16

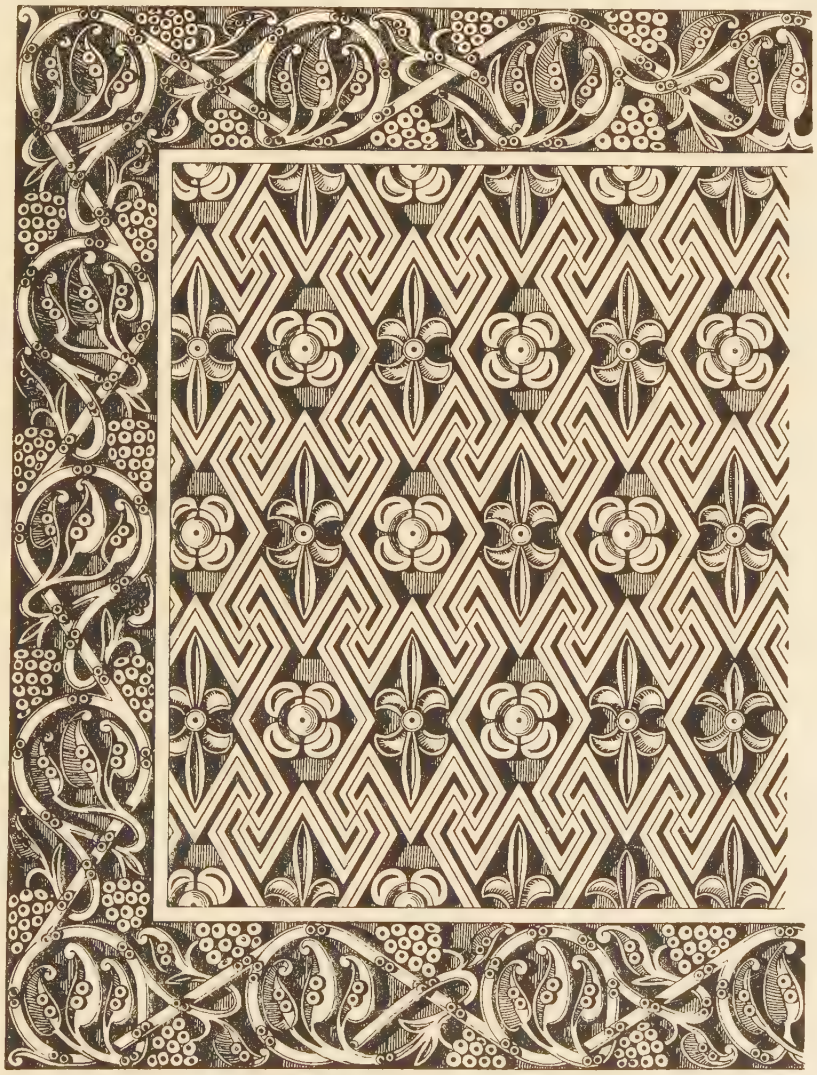


FIG. 10.
Panel 14

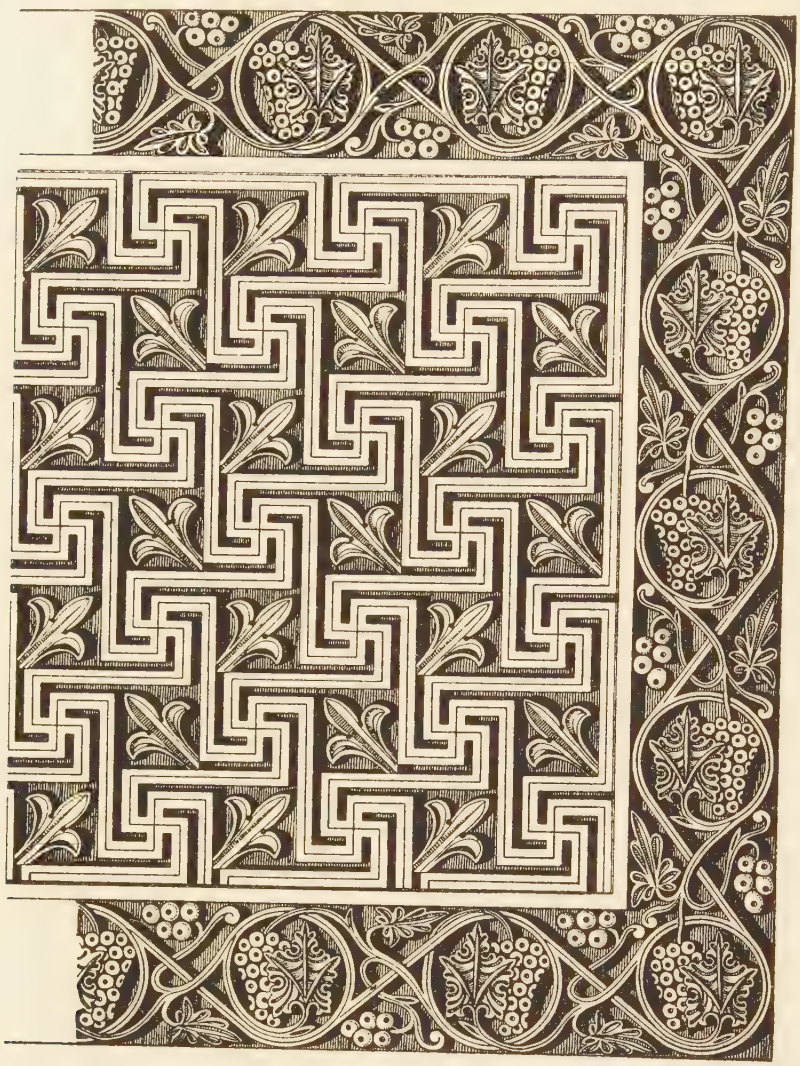


FIG. 11. Panel 6

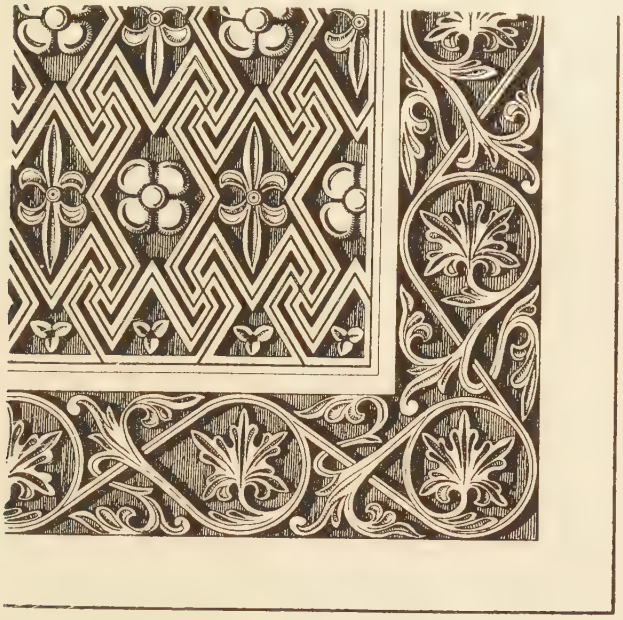


Fig. 12. Panel 1

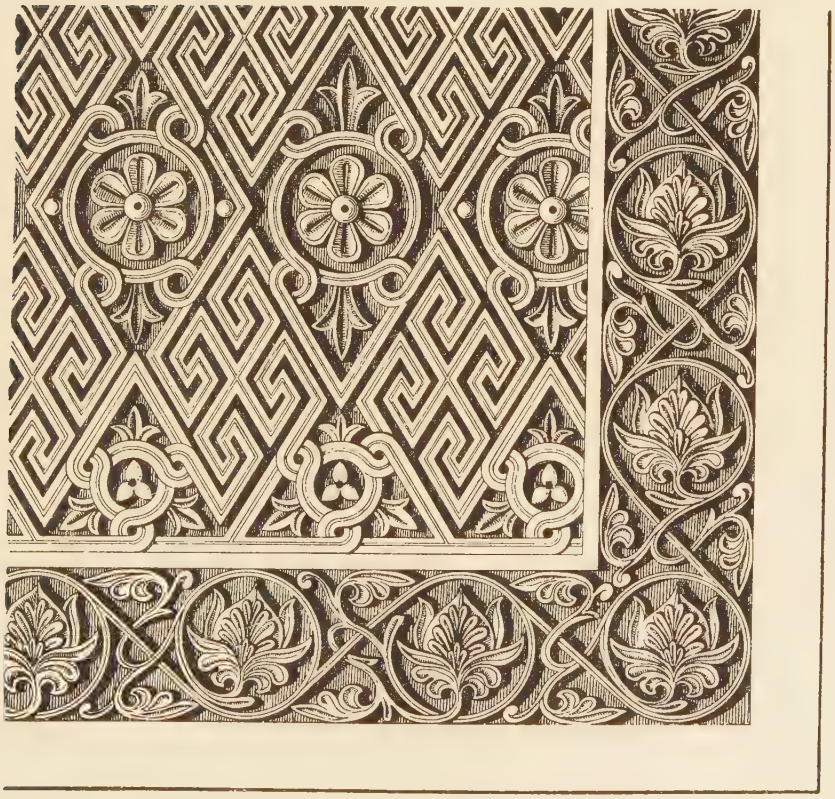


Fig. 13. Panel 2

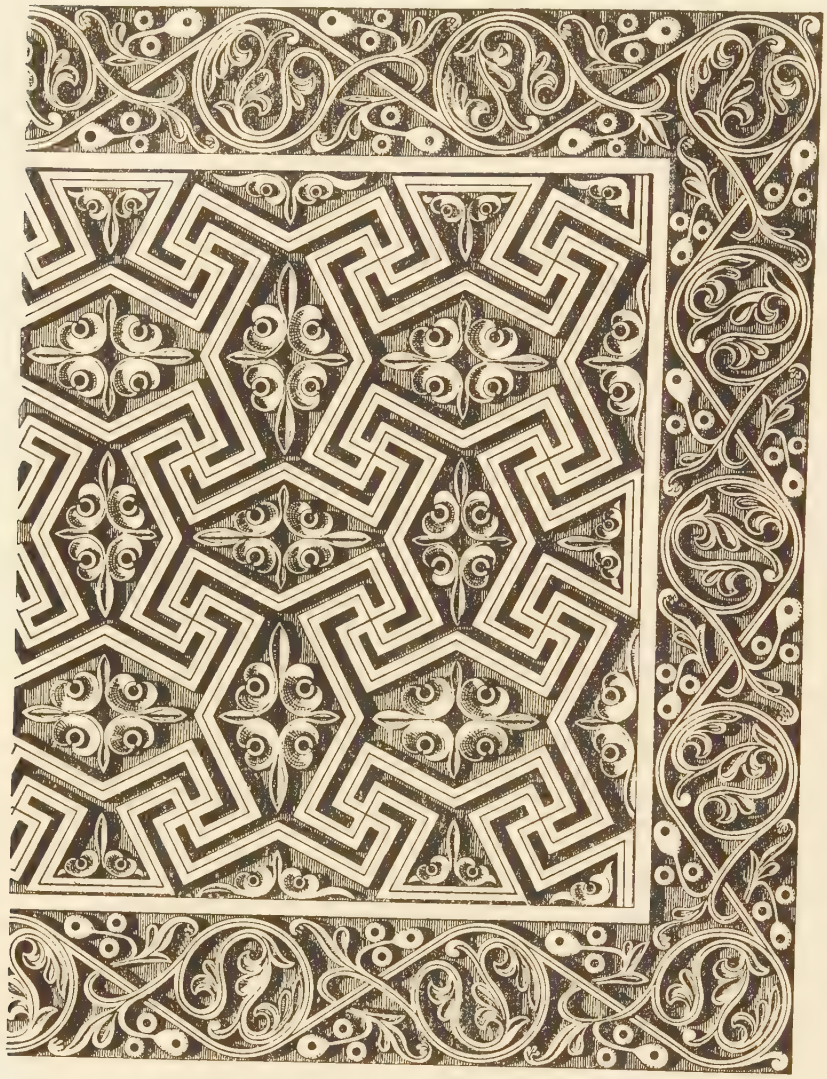


Fig. 14. Panel 9

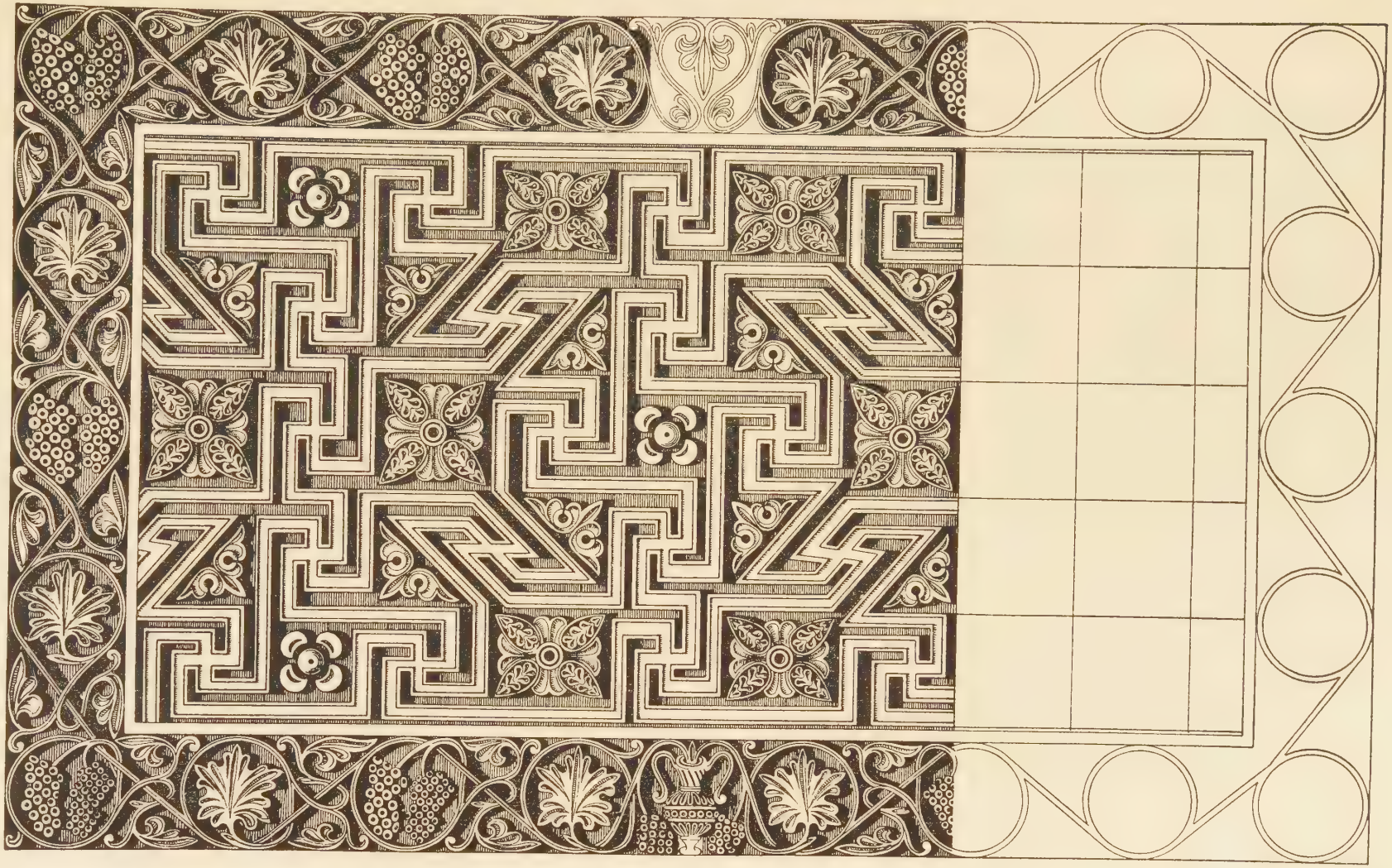


FIG. 15. Panel 3

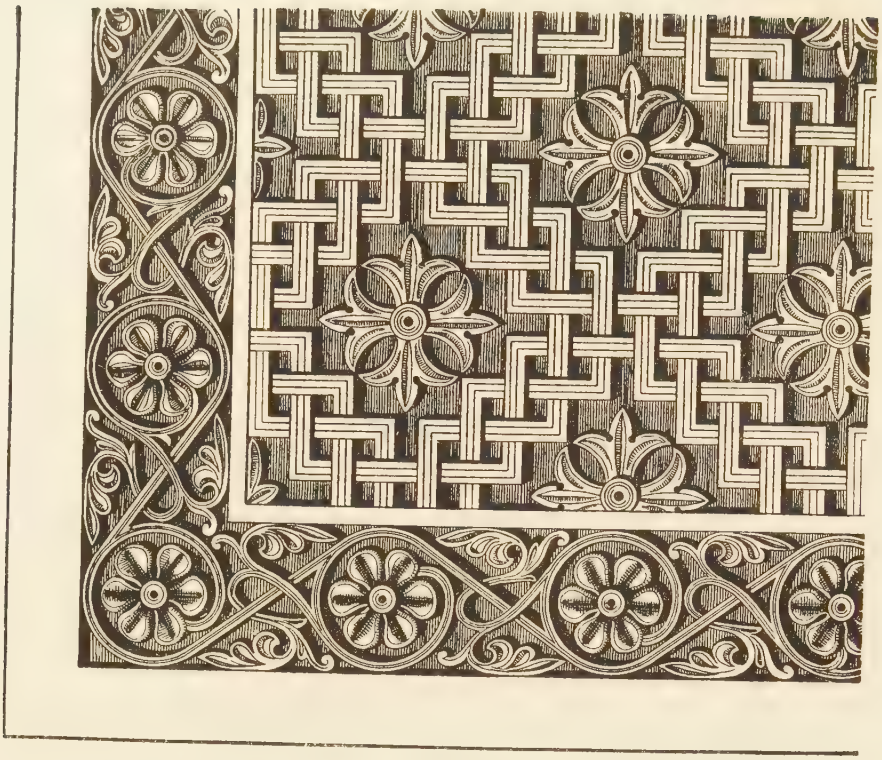


FIG. 16. Panel 1A

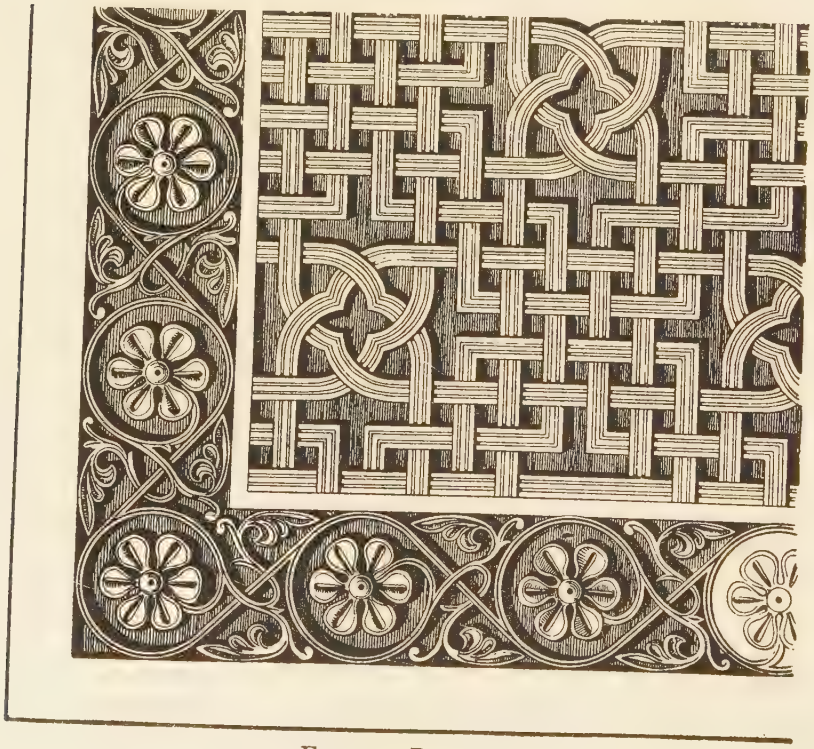


FIG. 17. Panel 2A

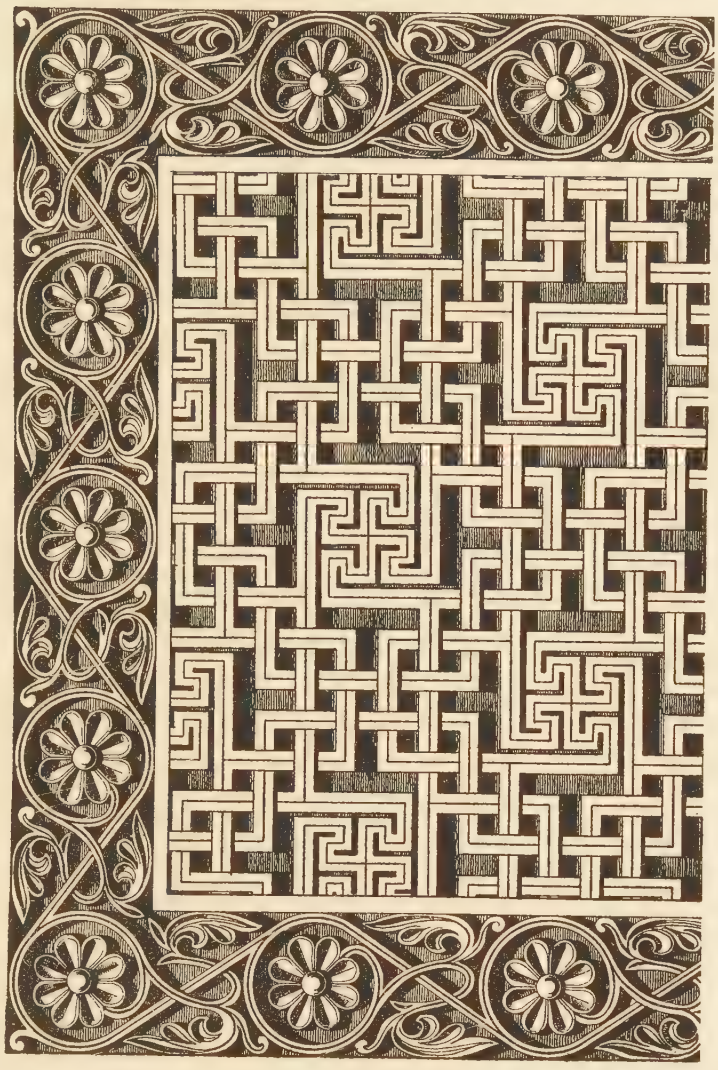


Fig. 18. Panel 9A

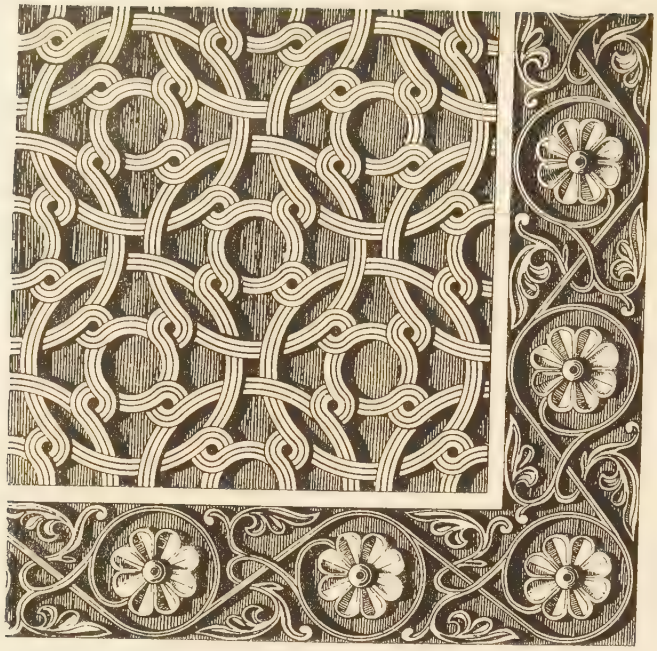


FIG. 19.
Panel 4A

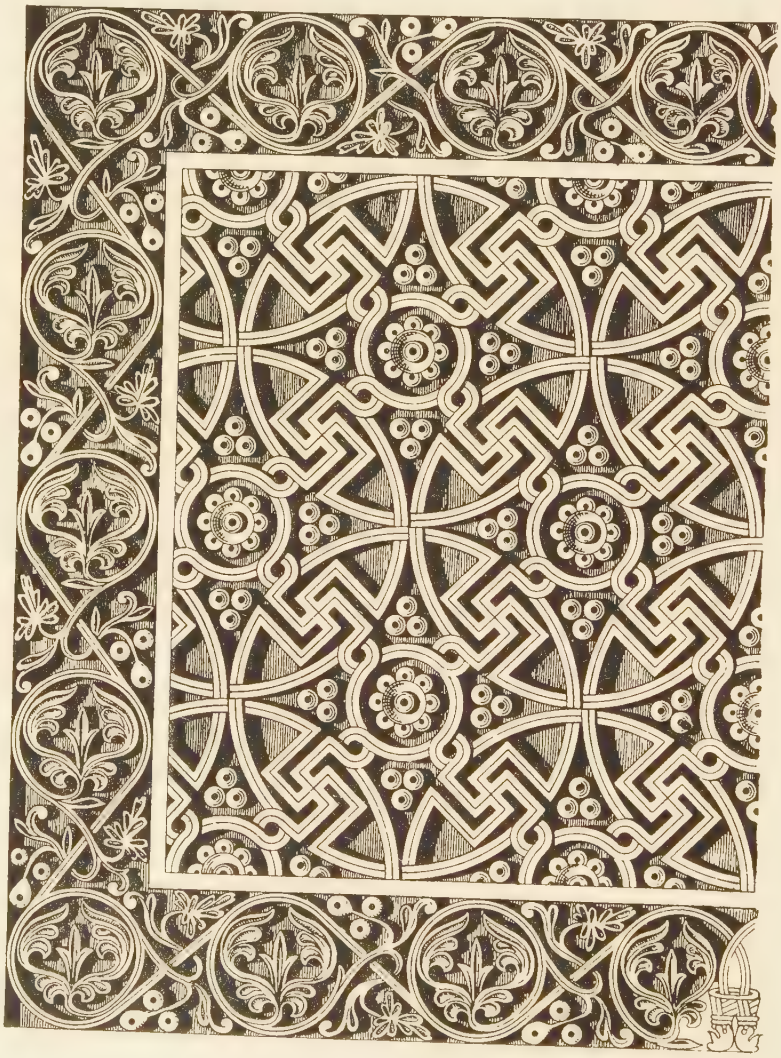


FIG. 20.
Panel 11

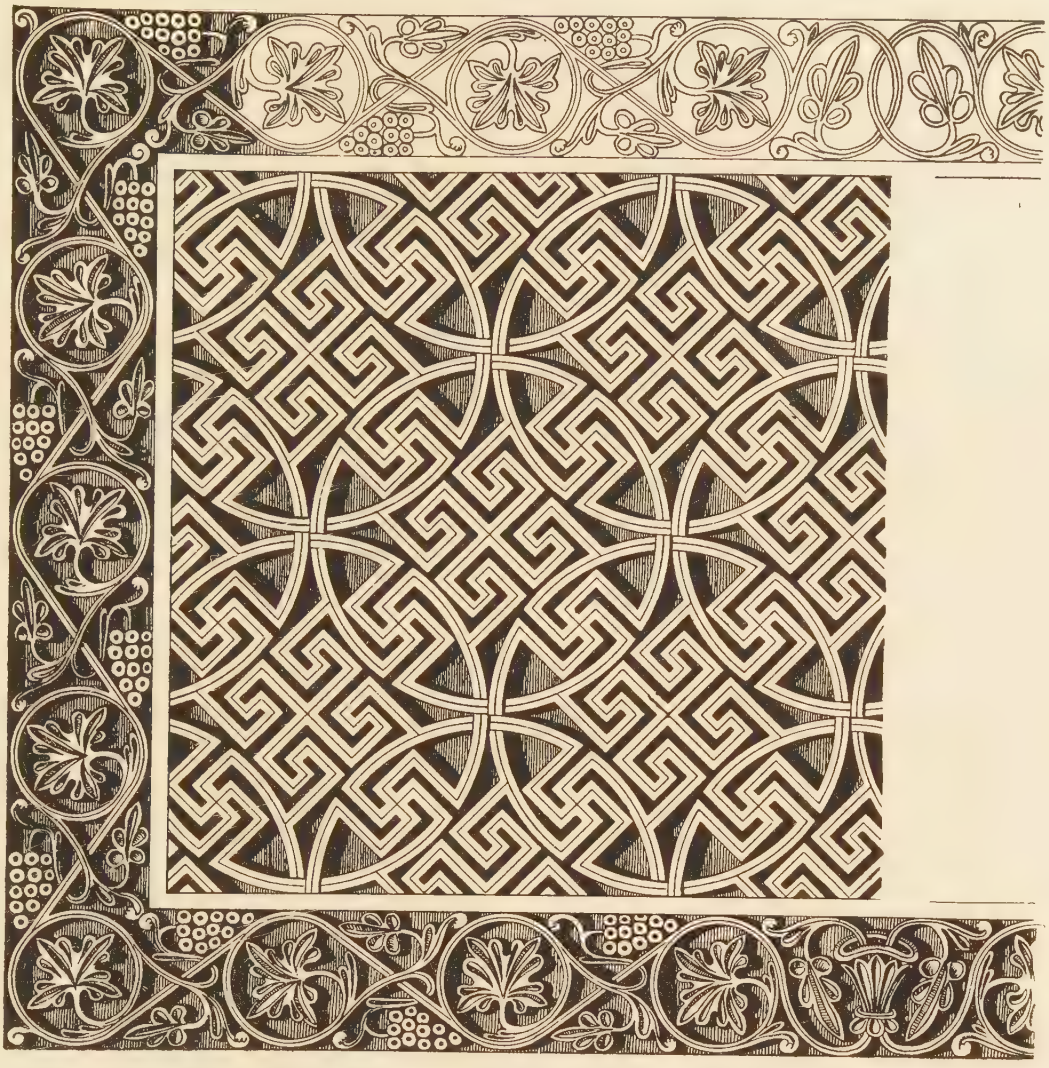


Fig. 21. Panel 10

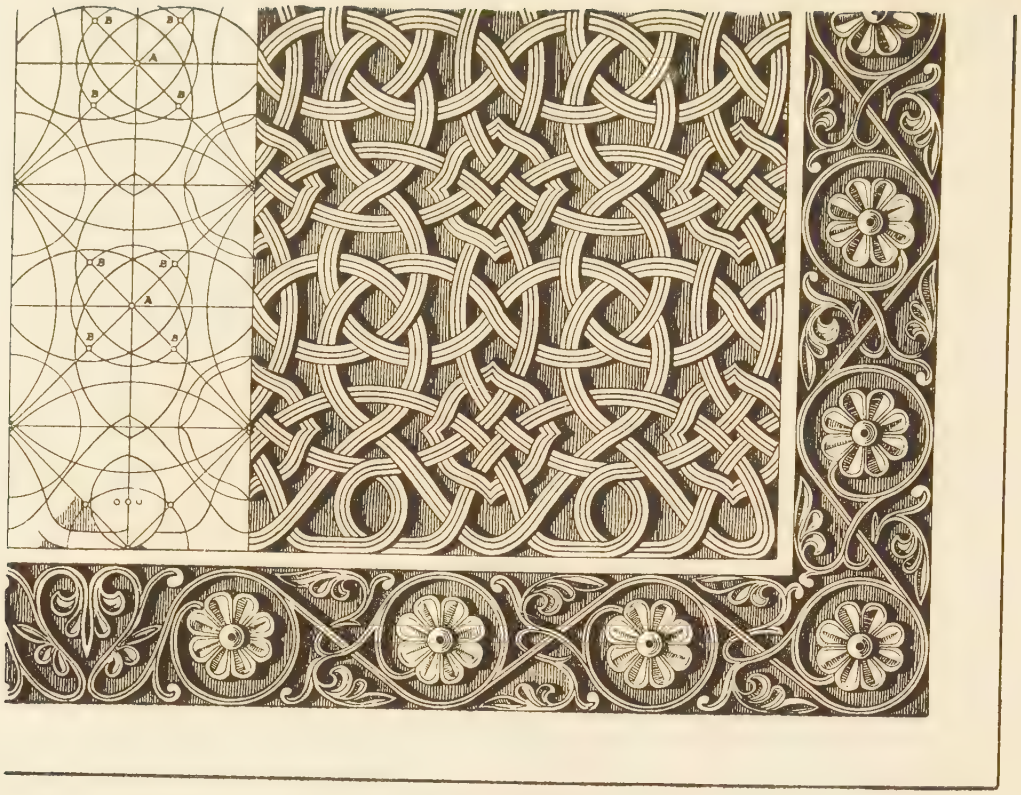


FIG. 22. Panel 3A

TOP

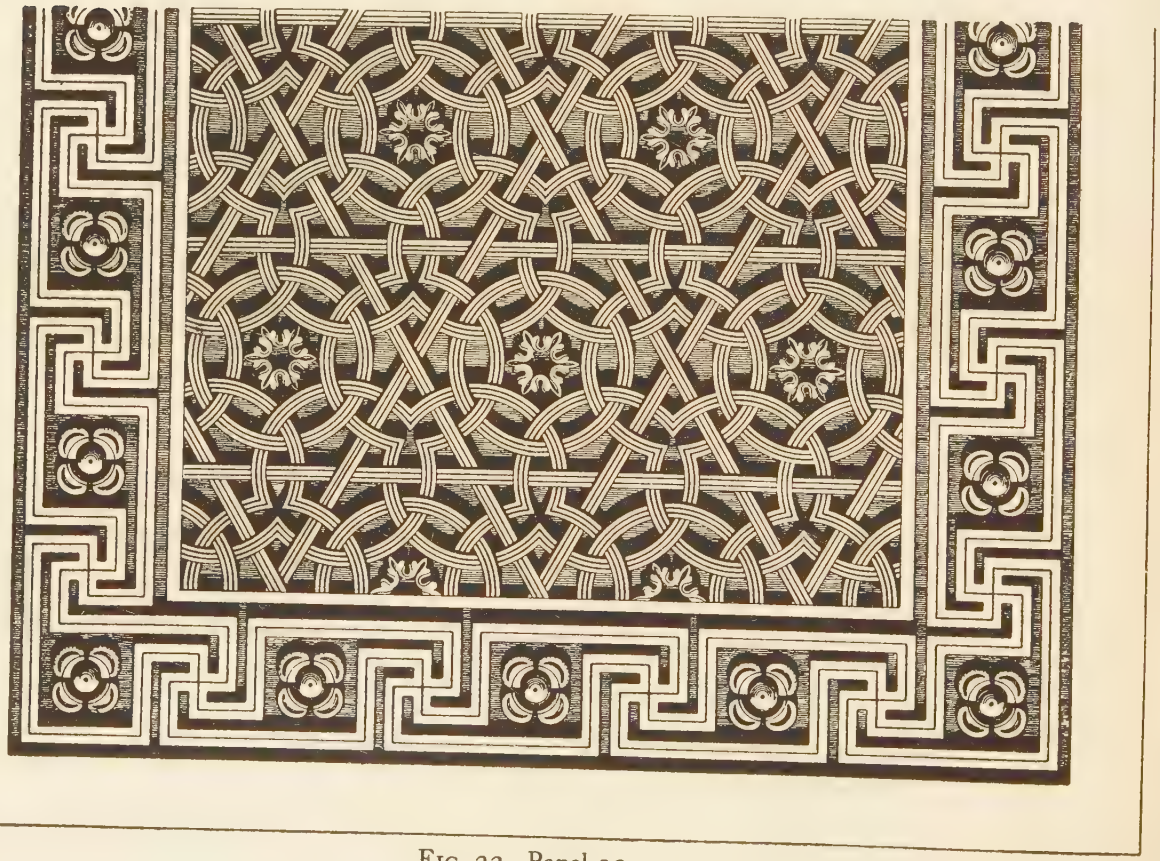


FIG. 23. Panel 13

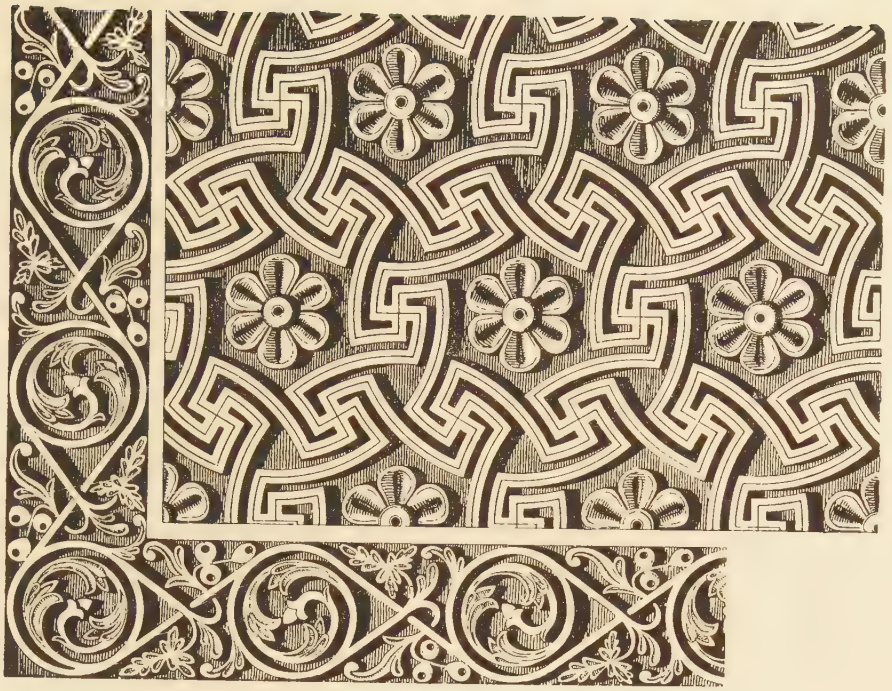


Fig. 24. Panel 4

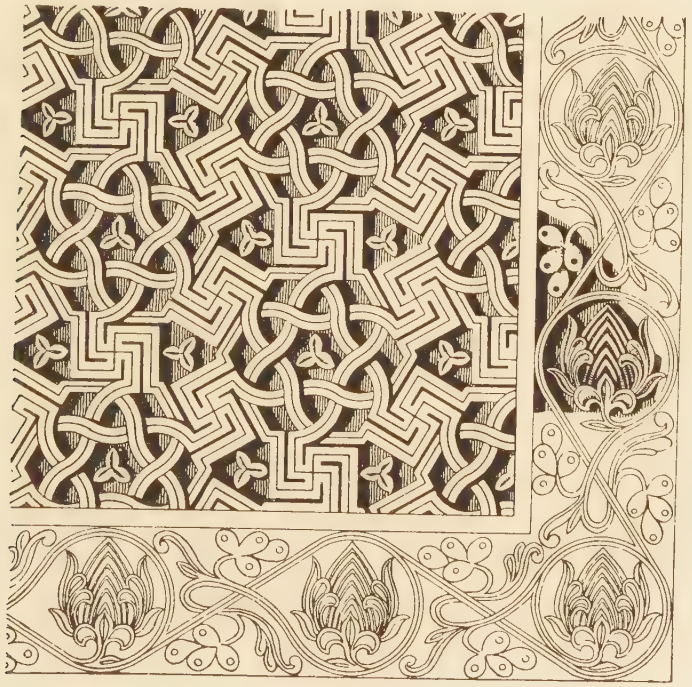


Fig. 25. Panel 5

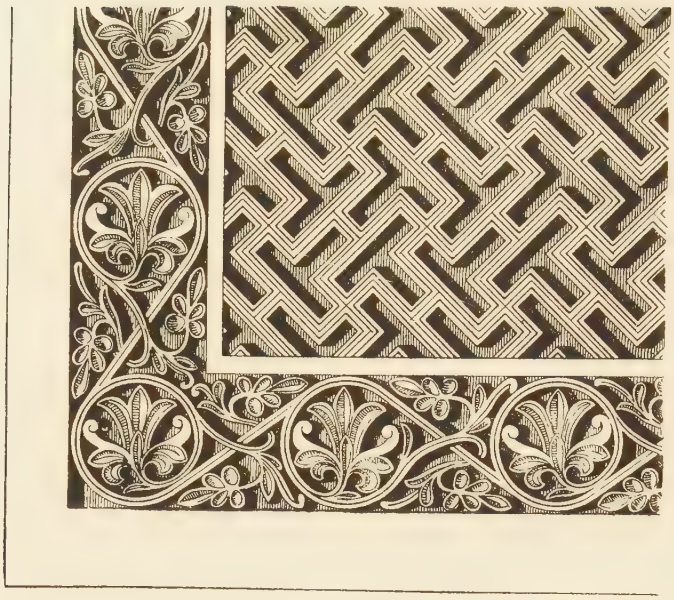


Fig. 26. Panel 12

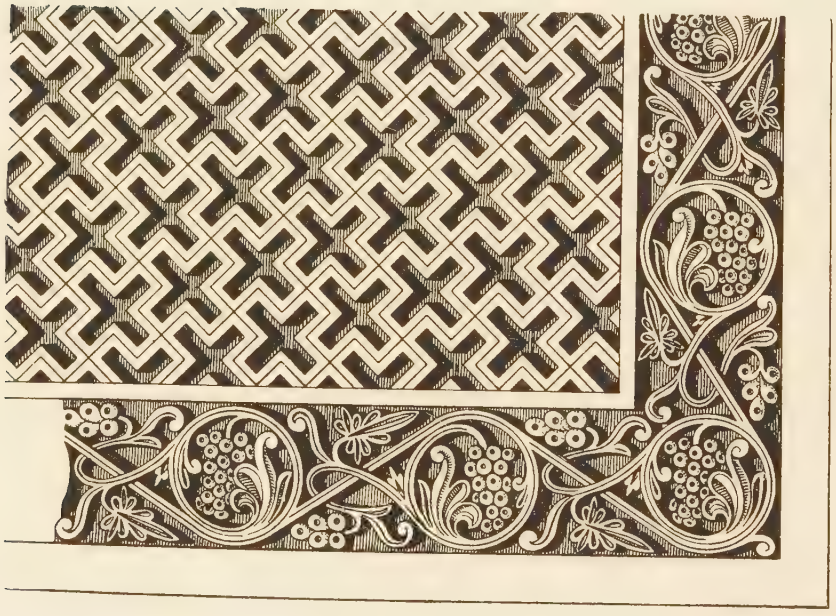


Fig. 27. Panel 7

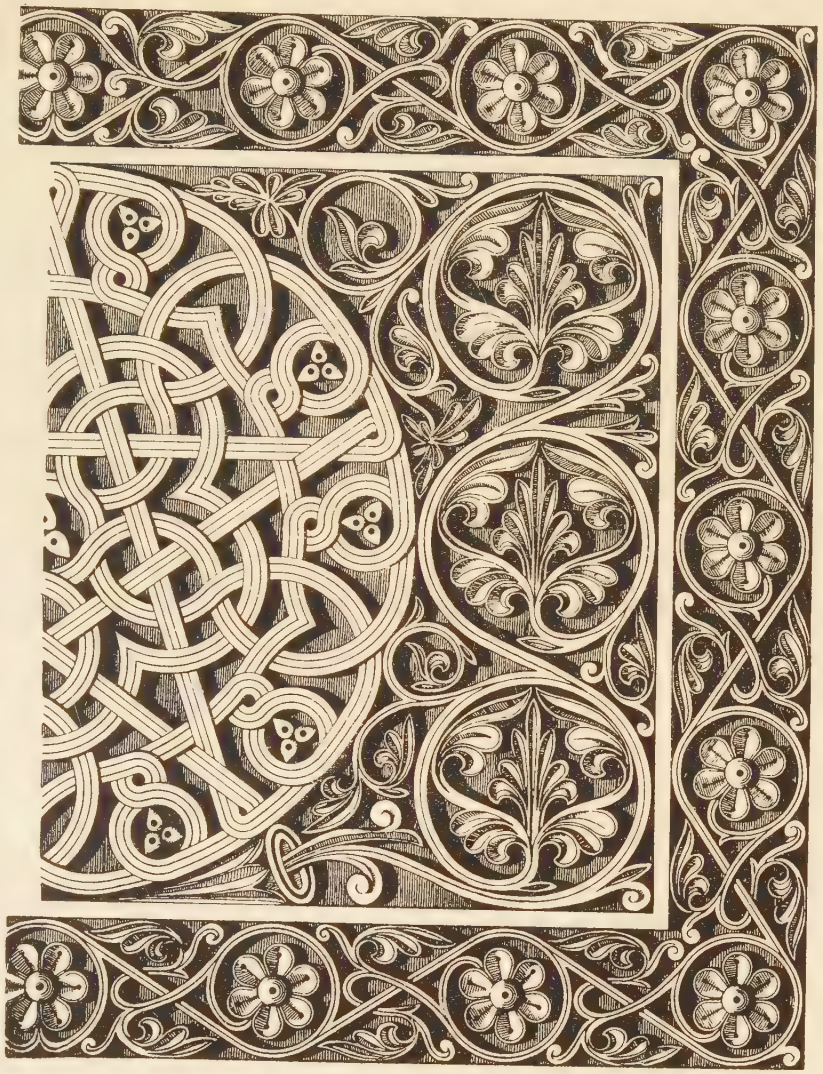


Fig. 28. Panel 14A

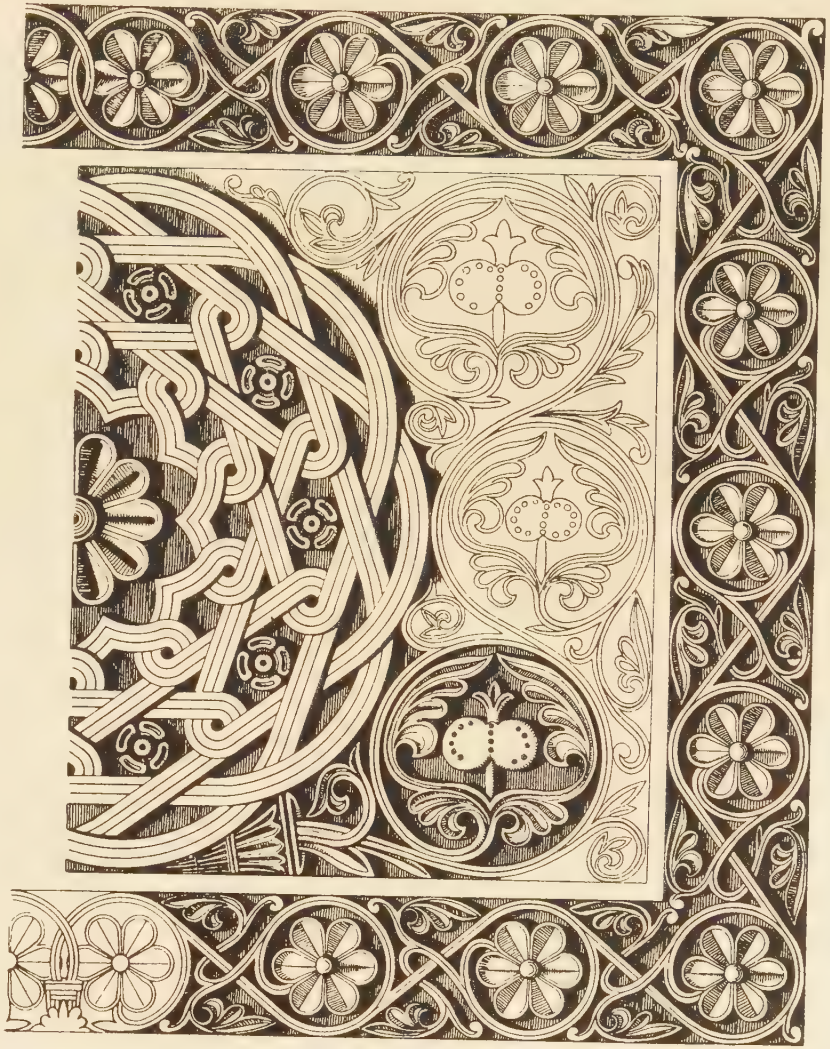


Fig. 29. Panel 8A

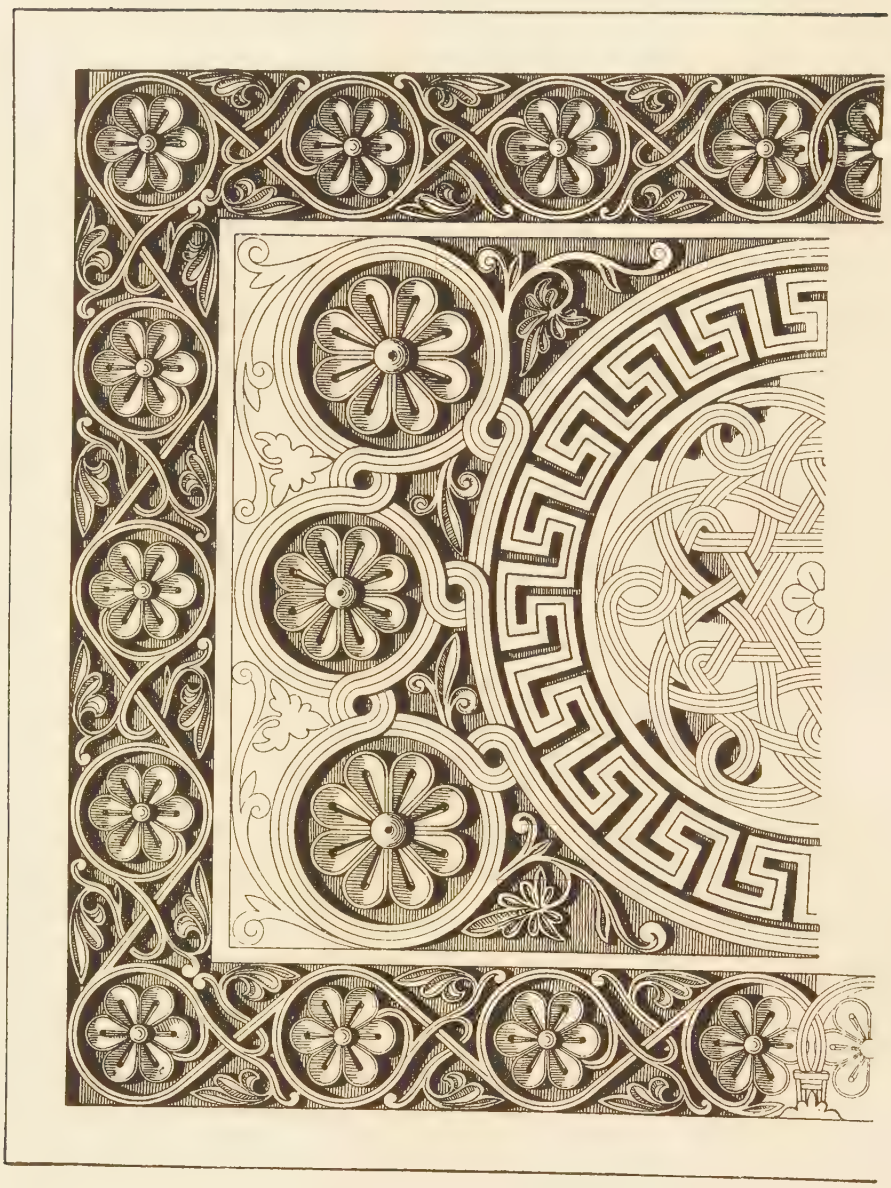


Fig. 30. Panel 6A

Fig. 31. Panel 15A

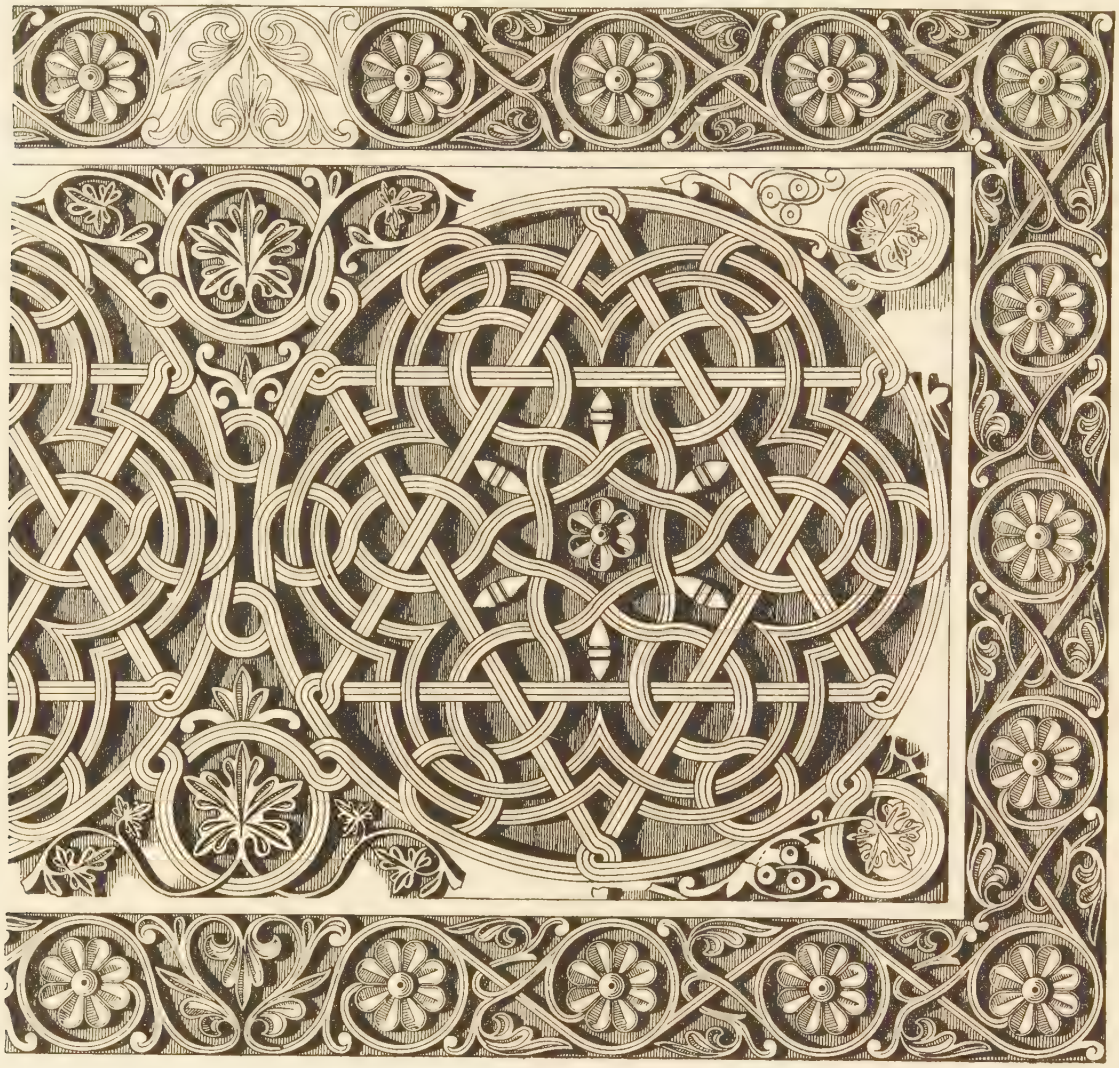


Fig. 32. Panel 10A

linked by loops at their points of contact (Figs. 3–7). Such patterns had formed the stock-in-trade of floor mosaic designers and others in Palestine, and indeed throughout the Hellenistic world, for centuries. Fig. 4, with circular compartments and additional knots to fill the spaces between, is a slight elaboration. Fig. 7 may be regarded as a variant either of Fig. 3 or of Fig. 6.

A second simple class of pattern (Figs. 8 and 9) consists of a lattice-work of straps which describe swastikas at alternate points of intersection, and give a six-sided compartment.[1] In Fig. 9 these compartments are filled by an independent system of linked squares threaded through the primary framework.

In a third group of designs (Figs. 10–15) the field is covered by a chequer-board or fretwork of lozenges or squares in which swastikas, square or skewed, alternate with floral panels. In Fig. 13 the swastikas are double-hooked and the straps describe an additional circle to help fill the free compartments. Fig. 15, the most elaborate design in this class, is unique in combining square with skewed swastikas. A similar pattern may be seen worked on some stones taken from the Coptic Church at Bāwīt, and formerly built into the gateway of the village mosque of Dashlūt.[2] In panel 9, Fig. 14, square-drawn swastikas separate diamond-shaped compartments which are set alternately upright and on their sides.

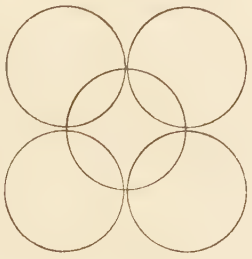


Fig. 33

The geometry of all the preceding designs is traced by single straps. In panels 1A, 2A, and 9A (Figs. 16, 17, and 18) the field is partitioned by diagonal bands of three or four interwoven straps. The trellis of diamonds so formed is the same in all three panels, though the fillings differ.

The fifth and largest group of repeating designs are composed of overlapping or interlacing circles. The patterns are built up from groupings of either five or seven circles. The former (Fig. 33) produces a system of concave-sided squares or star-shaped compartments separated by lozenges.[3] This is the design used for Figs. 19, 20, 21, and 22. When the scale is large enough, as in Figs. 20 and 21, the lozenges are filled with swastikas and the interspaced compartments with a swastika or other independent device. As an alternative, in Fig. 22, the basic circles are interlaced with chains of vertical and horizontal lozenges and their points of contact bound with a four-sided figure. When the scale is smaller, as in panel 4A (Fig. 19), the primary pattern may serve for a purely geometrical design with only a small looped circle inscribed in the star-shaped compartment. A grouping of seven circles (Fig. 34) produces a series of six-pointed compartments

[1] For a first-century Syrian example of this pattern in a mosaic floor cf. *Syria*, Vol. VII, Pl. 2, from Sidon; also the Princeton University's *Antioch-on-the-Orontes*, Vol. II, Pl. 33, panel E. For other examples see Avi-Yonah in *QDAP*, Vol. II, p. 139; Vol. III, p. 59, H. 3. On Fig. 8 see also note 3 on p. 28 below.

[2] Chassinat, *Fouilles à Baouît* in *MIFAO*, Vol. XIII, Pl. III. I understand that the fragments have now been acquired by a collector.

[3] Alternatively the basic figure may be envisaged as four equal circles tangent at a common point. We need not look for parallels to this pattern of widespread and ancient use in Egypt, the Aegean, and the East. For its immediate source the mosaic pavements of Christian Palestine were available. See Avi-Yonah, 'Mosaic Pavements in Palestine', *QDAP*, Vol. II, p. 141, key to patterns, J4.

as in Figs. 23 and 24. The structure of the pattern is brought out clearly in Fig. 23 by the rosettes set in the centres of the unbroken circles and by the straight lines which intersect on the centres of the six overlapping circles.[1] The design of panel 5 (Fig. 25) is not easily classified, but may perhaps be regarded as an elaboration of Fig. 24.[2]

Two other panels, Nos. 12 and 7 (Figs. 26 and 27), fall outside any of the classes just distinguished. Each consists of a close network of swastikas. Both of these rather unusual patterns are represented on the engraved column shafts of the mosque courtyard at Diyarbekr.[3] A single fragment of a third and similar pattern is shown on Pl. XVII (top left corner).

Before leaving the subject of geometrical patterns to describe the floral motifs which accompany them, we must briefly note the concentric geometrical compositions which occupy the centre of the field in the second main category of panels from the central court, shown in Figs. 28–32. Some of these constructions are related to those we have just described, as for example, the centre of the roundels in Fig. 32 to the hexagons of Fig. 25, and the general geometry of Fig. 32 to that of Fig. 23.[4] But, generally speaking, the medallions embody a wider range of geometrical figures and develop them with greater elaboration. Thus in the few designs which have survived, in addition to the regular hexagons of Fig. 32, five-, eight- and ten-fold subdivisions of a circle are all employed. The reverse side of panel 11 has a polygonal figure too fragmentary to be reconstructed (Pl. VIII).

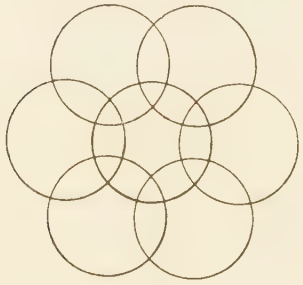


Fig. 34

We now come to the floral and quasi-floral motifs which serve to fill the compartments and voids in both classes of panels. In the repeating geometrical panels these are composed of the simplest possible elements, rosettes, trefoils, lancet- and heart-shaped leaves and palmettes grouped as required to fill square, lozenge-shaped, or triangular compartments. Figs. 35–38 bring together the principal varieties of these motifs. For convenience we may classify them as follows.

Simple Rosettes (Fig. 35). Fig. 35(*a*) is distinguished by the fat bean-shaped petals, never more than four in number. It appears in panels 1, 3, 13 (border), 14, 15A, and probably 7A (Figs. 12, 15, 23, 10, 31, 33); (*b*) is the ordinary rosette or daisy, which appears with 6, 8, or 10 petals; (*c*), from panel 11 (Fig. 20), has no basis in nature; it is presumably suggested by the clusters of grapes that are used in the

[1] See p. 52 below. For a similar pattern see Creswell's *Early Muslim Architecture*, Vol. I, Pl. 46, a marble window grille in the Great Mosque at Damascus.

[2] For the geometrical basis of the pattern see Fig. 66, p. 52, below. A similar pattern may be seen on the fragments of an eighth-century carved wooden panel in the Arab Museum at Cairo. Pauty, *Catalogue du Musée arabe, Les Bois sculptés*, Pl. V, 8367.

[3] Strzygowski, *Amida*, Fig. 78, Nos. 6 and 8. It is curious to note that, of the eight geometrical designs there shown, no less than four appear in our panels, Nos. 2 and 3 of the Amida patterns being almost identical with the geometrical strapwork of our Figs. 8 and 11.

[4] For a six-pointed star inscribed in a circle, and all adapted to a rectangular field, cf. the carved teak panel from Takrit shown by Dimand in 'Studies in Islamic Ornament', *Ars Islamica*, Vol. IV, Fig. 4. Also a panel in the minbar of Qairawan; Fig. 39 in the same article.

triangular spaces of the same panel, and appear in a more naturalistic form in the border scroll.

Palmette Compositions. Fig. 36 shows different motifs using three-, or five-, or seven-lobed palmettes. In (*d*), which appears in panels 3, 9, and 7A (Figs. 15, 14, 3) the bottom

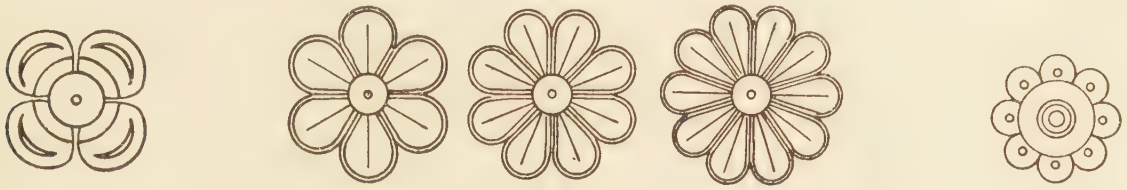


Fig. 35. Rosettes

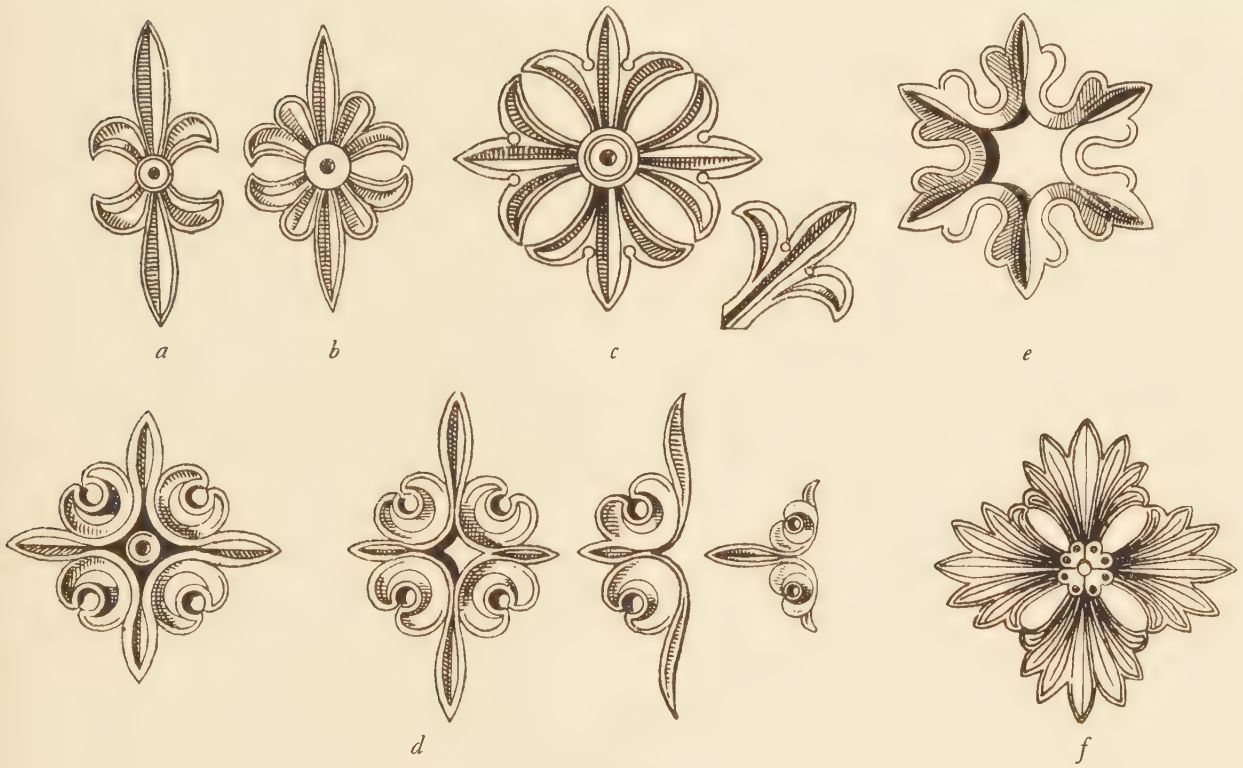


Fig. 36. Palmette motifs

lobes of each trefoil are combined with their neighbours to form a kidney-shaped leaf, curling round a circular eye; the visual effect is to split up the original trefoils and suggest a new way of looking at the whole motif. Split in half it is used for triangular compartments. At Kh. Mafjar the same motif is used in stone ornament, and it may be seen in the Takrit panels adapted to a variety of positions.[1] (*e*), from panel 13 (Fig. 23) is a

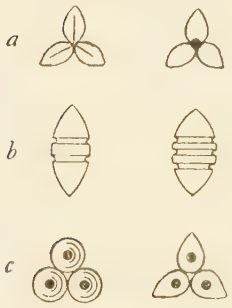
[1] Dimand, *Ars Islamica*, Vol. IV, Fig. 4. Compare also the jambs and lintel of one of the doorways at Qasr et Tuba: Jaussen and Savignac, *Mission archéol. en Arabie*, *Les Châteaux arabes*, Pl. XI.

less stylized combination of trefoils adapted to a six-pointed compartment. (*f*), from panel 13A (Fig. 6), recurs, with five-lobed palmettes, in 5A (Fig. 5). The centre is formed by four heart-shaped leaves representing a variant of the leaves in Fig. 37 (*a*).

a *b* *c* *d* *e*

FIG. 37. Composite rosettes

Composite Rosettes. Fig. 37 brings together five composite rosettes each composed of alternating motifs radiating from a centre. Of these (*a*), which comes from panel 12A (Fig. 4), consists of four almond-shaped petals alternating with heart-shaped leaves. The same leaves appear in (*d*), and again on a smaller scale to fill the almond-shaped petals of (*c*). Here a row of heart-shaped leaves are strung together in a chain as in certain Sasanian textile patterns.[1] Fig. 37 (*b*) and (*d*), from an isolated fragment, contain a motif consisting of a half-palmette enfolded in an almond-shaped leaf.[2]



a *b* *c*

FIG. 38

Lastly, Fig. 38 gives a group of minor ornaments which require little comment. The group of three circles with central dots (*c*) seems to have been suggested by the triple grape clusters which appear in the scroll borders of many panels.

The spandrel-shaped ends of those panels which contained a medallion in the centre invited a freer treatment than the smaller and more rigid compartments of the repeating designs; and we find that the ornament filling them displays a naturalistic tendency which contrasts agreeably with the comparative rigidity of the geometrical frame.

The finest is No. 15A (Fig. 31, Pl. XV), in which the whole space is filled with a naturalistic festoon of vines emerging from a horn-like sheath. The freedom and beauty of this composition is as remarkable as its naturalism.[3]

None of the other panels shows quite so free a treatment. Nos. 14A and 8A (Figs. 28 and 29) contain graceful but formal festoons, also emerging from horn-like sheaths, which develop into tendrils ending in half-palmettes or naturalistic vine-leaves as required by the space. The main stem is in the form of a scroll describing three full circles which are filled with a characteristic motif consisting of two half-palmettes which sprout back to

[1] Cf. Herzfeld, *Am Tor von Asien*, p. 128, Fig. 37, p. 129, Fig. 38, &c.

[2] Cf. one of the bronze tie-beam covers in the Dome of the Rock. Creswell, *op. cit.*, Vol. I, Pl. 27*b*.

[3] Note the three-dimensional effect of the overlapping leaves and grapes and interlacing stems. Fragments of a second panel with the same design are shown in Pl. XVI.

back from a single stem and then develop into a further pair of half-palmettes facing inwards. The whole device encloses in Fig. 29 a pomegranate and in Fig. 28 a seven-lobed full palmette (see p. 40 below).

In Figs. 30 and 32 the treatment of the 'spandrels' is rather stiffer, but the leaves and tendrils which fill the triangular spaces are still treated naturalistically.

II. *Panels of the Forecourt Balustrade.* For the panels of the forecourt balustrade a single design was used throughout, varied only by the decoration of the surrounding borders.

The design was that shown in Fig. 39. It consists of two superimposed arcades supported by clusters of four columns which stand on bases and carry tiny acanthus capitals. The pairs of shafts visible on each side are decorated alternately with spiral cording and vertical flutes. In each group of columns the pair which appears on one face of the panel has the opposite ornament to the pair which backs against it. The arches are semicircular; their fronts are decorated with a running chain of trefoils, and the outer borders of these describe a series of shallow arcs passing from one end of the panel to the other. Two half-palmettes set fanwise fill the shallow spandrels.

The columns of the upper row are set on the arches of the lower so that there is a difference of one in the number of arches forming the two arcades. So far as the fragments enable us to judge, the arrangement invariably gave eight arches to the upper row and nine to the lower.

The clusters of columns in this illogical but rather pleasing design repeat in miniature the quadruple columns that carried the lower arcade of the galleries to which the balustrade belonged. Clusters of columns, three abreast and three deep, were also used to support the vaulting in the entrance hall of the palace, where they were given a coating of stucco carved as here with spiral and vertical flutings. The non-structural spacing of a column over the centre of an arch asserts the sculptor's freedom from architectural conceptions. An unfinished pierced marble panel from Kh. Mafjar[1] also shows a two-arcaded design, and the same may be seen illuminated in an early Qur'an of the first or second century of the Hijra.[2]

III. *Border Designs.* The border designs of both the central court and forecourt panels may conveniently be treated together since the motifs are the same or similar.[3] They fall into three classes: the first and most numerous is of scroll patterns (Figs. 40–45, &c.), which are common to the panels of both balustrades; the second class contains floral motifs resting on divided and linked stems (Figs. 46–50 and Pl. XVII D–G), which are found only in the forecourt; lastly one border, that of panel 13 in the central court, is composed simply of alternate swastikas and squares containing a rosette (Fig. 23).

[1] *QDAP*, Vol. VI, Pl. LXIV, 3; Vol. XII, Pl. IX.

[2] In the Khedivial Library, Cairo: Moritz, *Arabic Palaeography*, Pl. 6. We may note in passing that many of the designs with arcaded motifs in the pages of the same Qur'an show strong Sasanian influence. Cf. Pls. 2 and 5 for example.

[3] Figs. 40–50 bring together the identifiable border patterns belonging to panels from the forecourt. Of these Fig. 40 gives variants of a pattern used on one side of every panel.

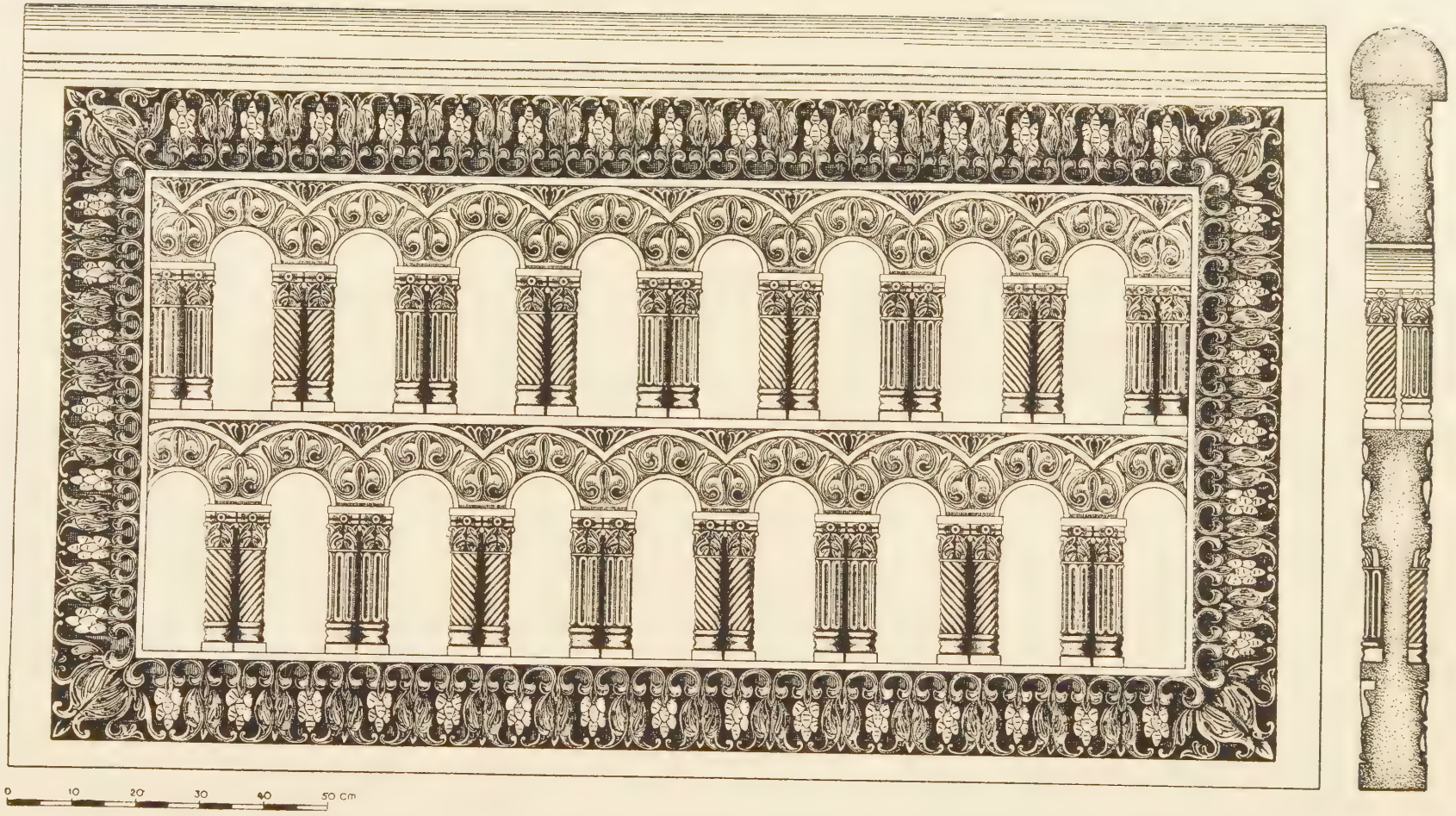


Fig. 39. Forecourt Panel

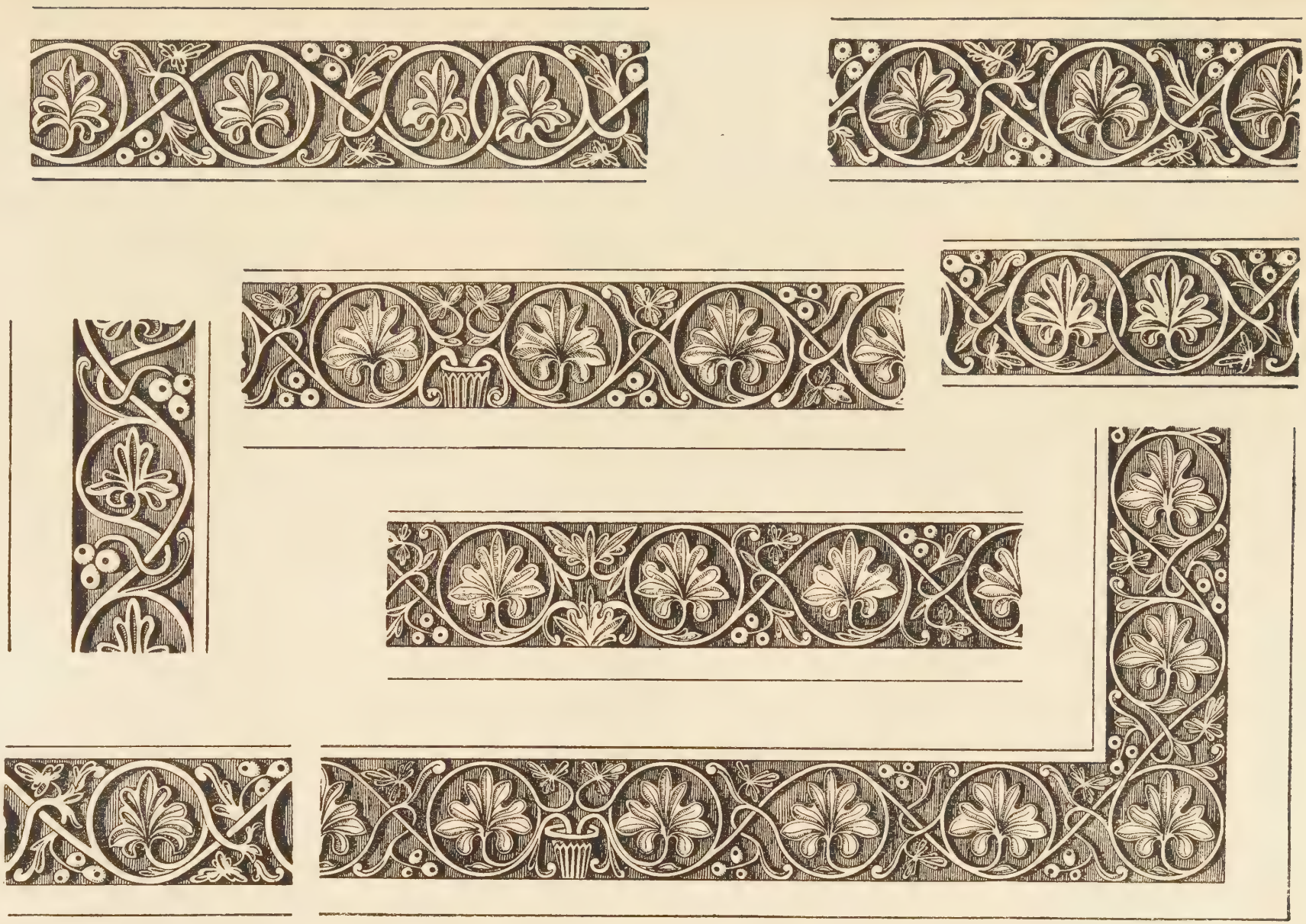


Fig. 40. Vine leaf borders from the Forecourt

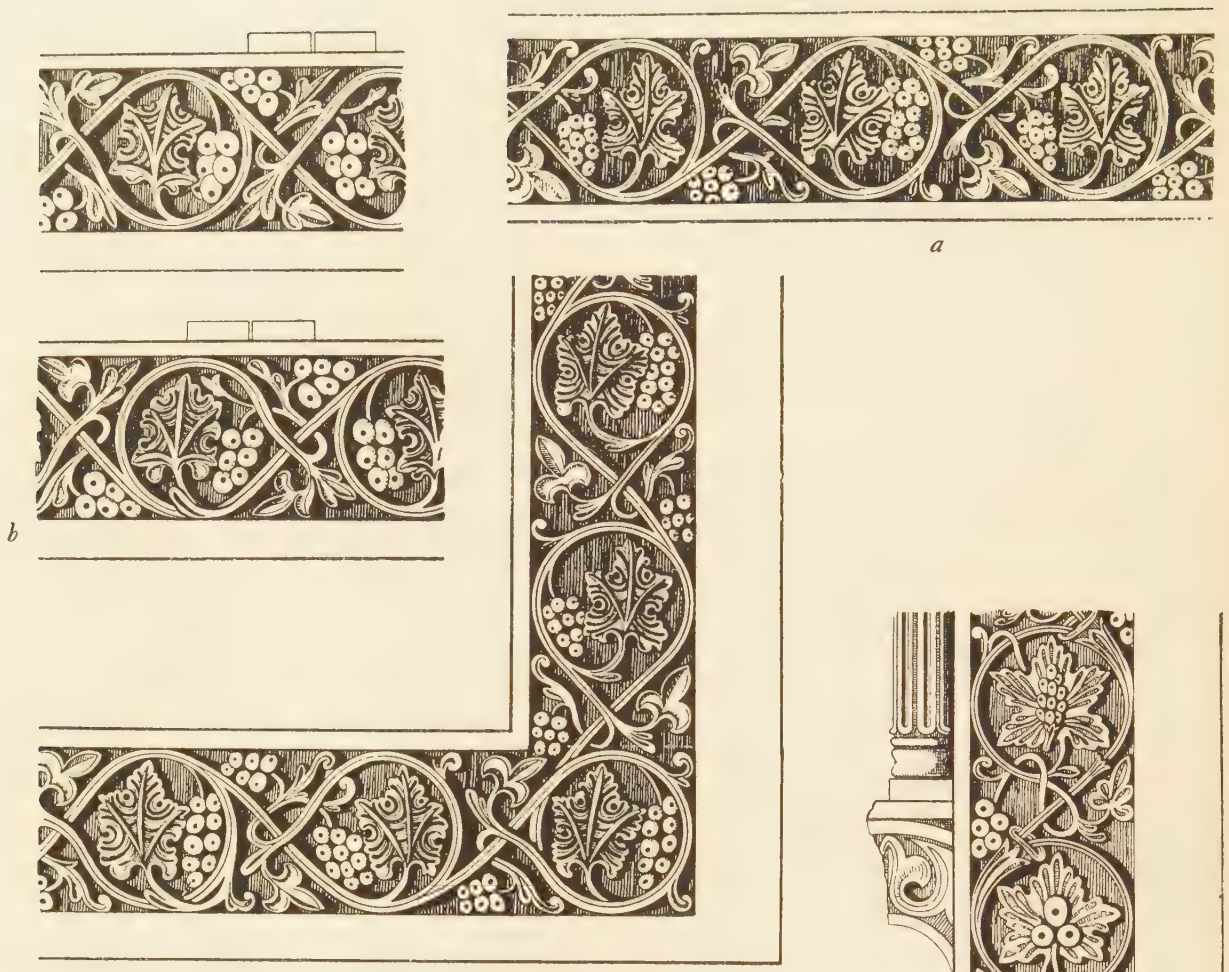


FIG. 42. Vine leaf borders from the Forecourt

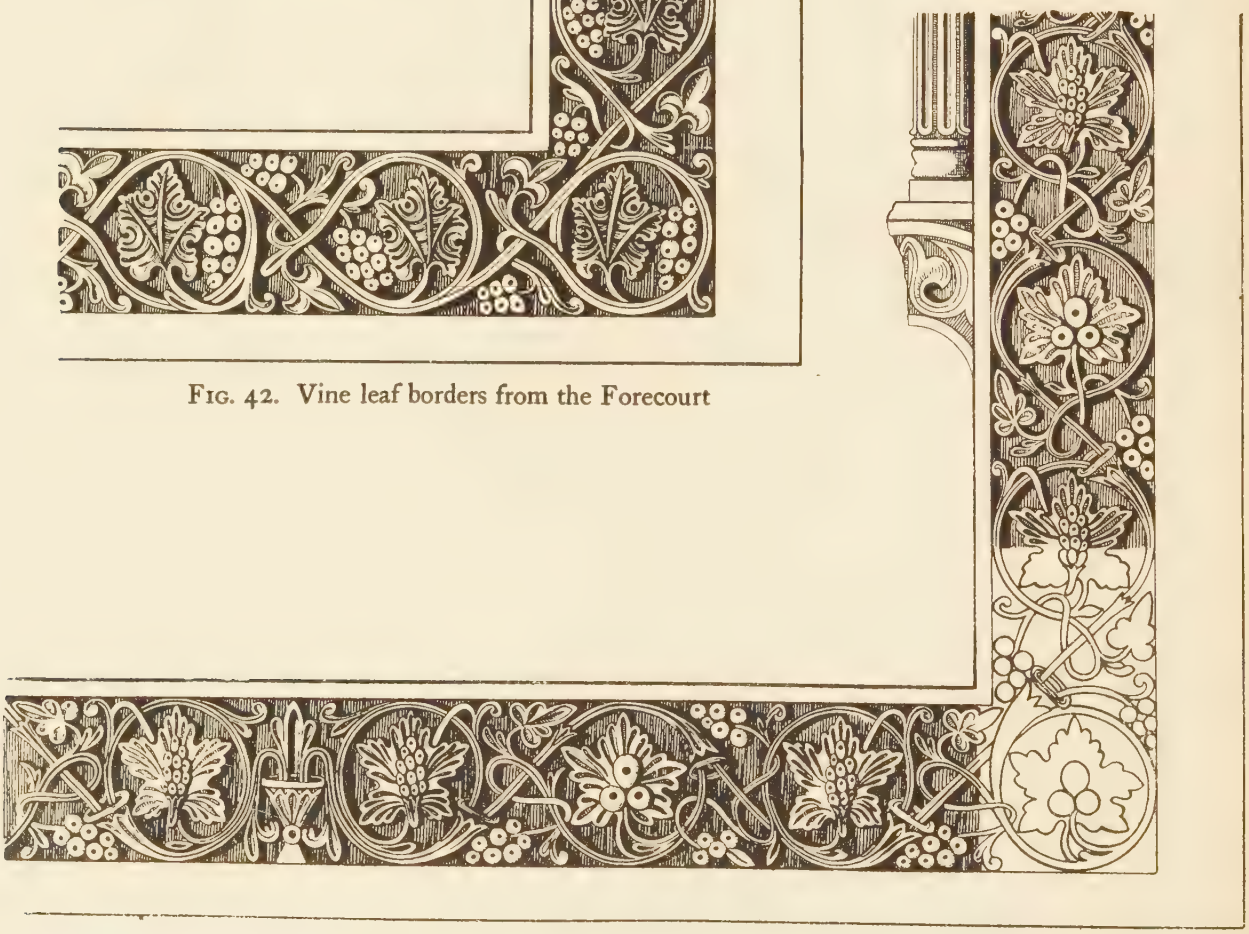


FIG. 41. Vine leaf and grape border from the Forecourt

The scrolls have slender stems, usually divided by an axial groove. They are laid out with almost geometrical regularity on a basis of circles inscribed in the full width of the border and joined by lines tangent to alternate sides.[1] The distance between centres depends on the length of the border to be filled and varies from one screen to another, and between horizontal and vertical borders. In the panels of the central court the stems between the circles are drawn as straight lines, but in the forecourt they are slightly

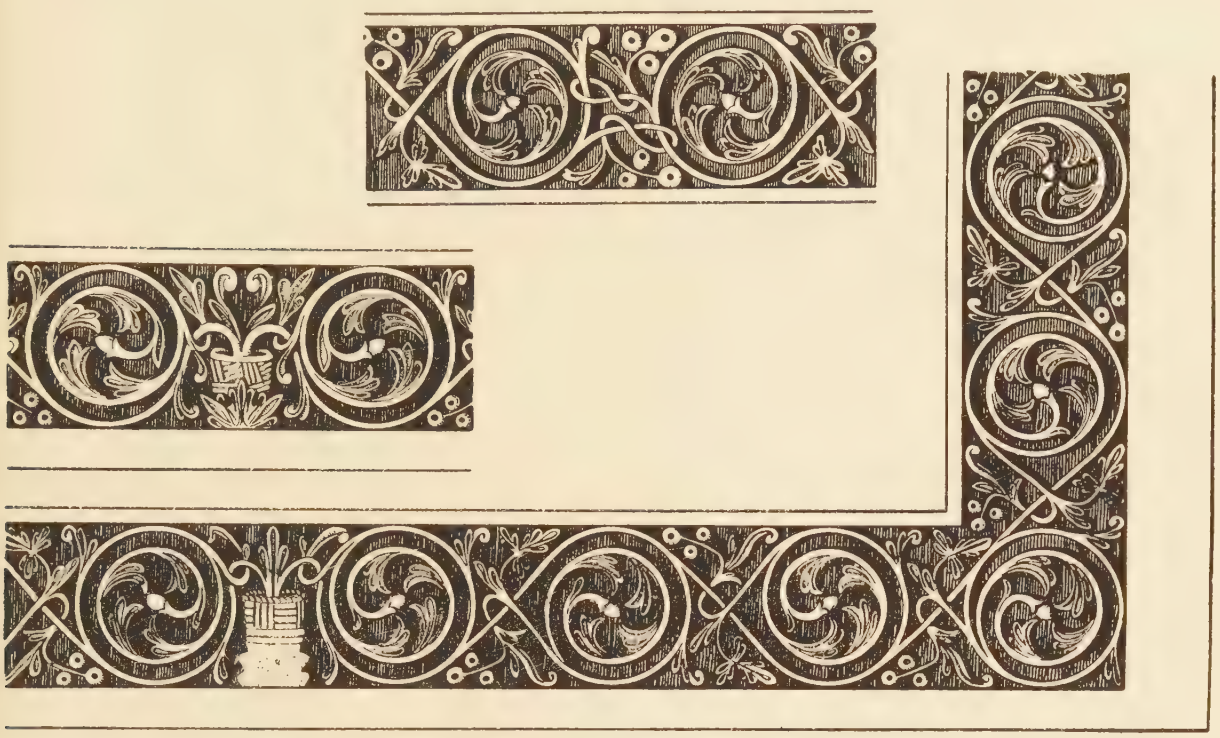


Fig. 43. Acanthus Whorls on a panel from the Forecourt

curved; this and other details of difference between the one balustrade and the other may be regarded as evidence of different teams at work.

In the panels of the central court the movement of the scrolls is symmetrical about the vertical axis of the panel: they start from a point in the centre of the bottom border and proceed to right and left until they meet again at the centre of the top. The starting-point is either a vase, as in panels 3, 10, and 15 (Figs. 15, 21, and 7), or a composition of half-palmettes as in panels 3A and 10A (Figs. 22 and 32), or simply a common circle as in 14A (Fig. 28). The baskets suggested in the drawings of Figs. 8, 20, 29, and 30 are based on examples from the forecourt. In the forecourt panels the arrangement was different: here the scrolls started from two points which divided the bottom border into three equal parts; the outer scrolls proceeded to right and left in the usual way and ended

[1] One fragment, Pl. XVII, top left, is apparently exceptional. It shows part of a bay-leaf chain apparently interlacing with a vine stem. The fragment is too incomplete for reconstruction but seems to represent a twisted band, like a pattern recorded by Chassinat from the South Church at Bāwīt, *Fouilles à Baoût*, Pls. LXIII and LXXII, 2.

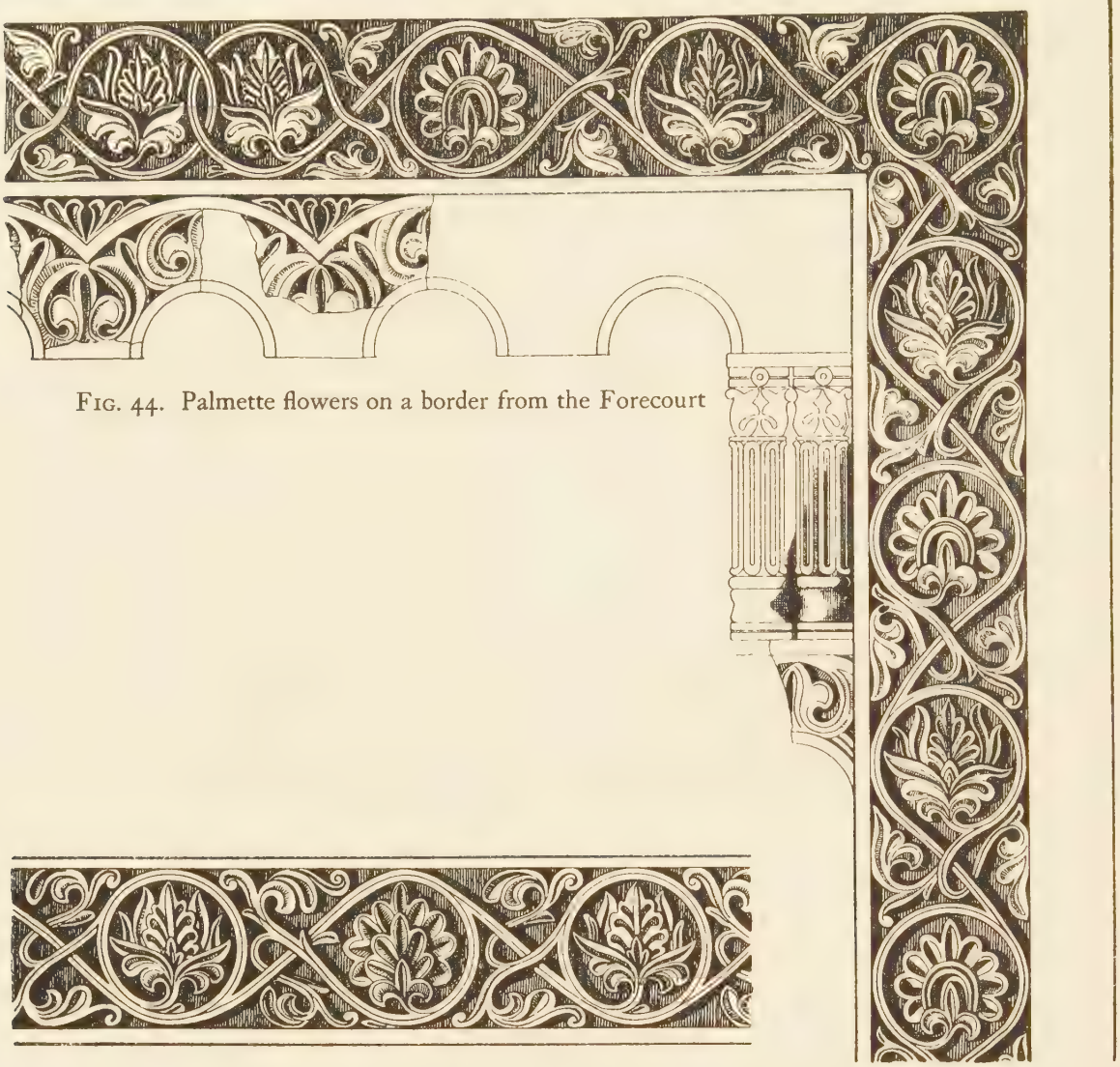


Fig. 44. Palmette flowers on a border from the Forecourt

Fig. 45. Palmette flower border from the Forecourt

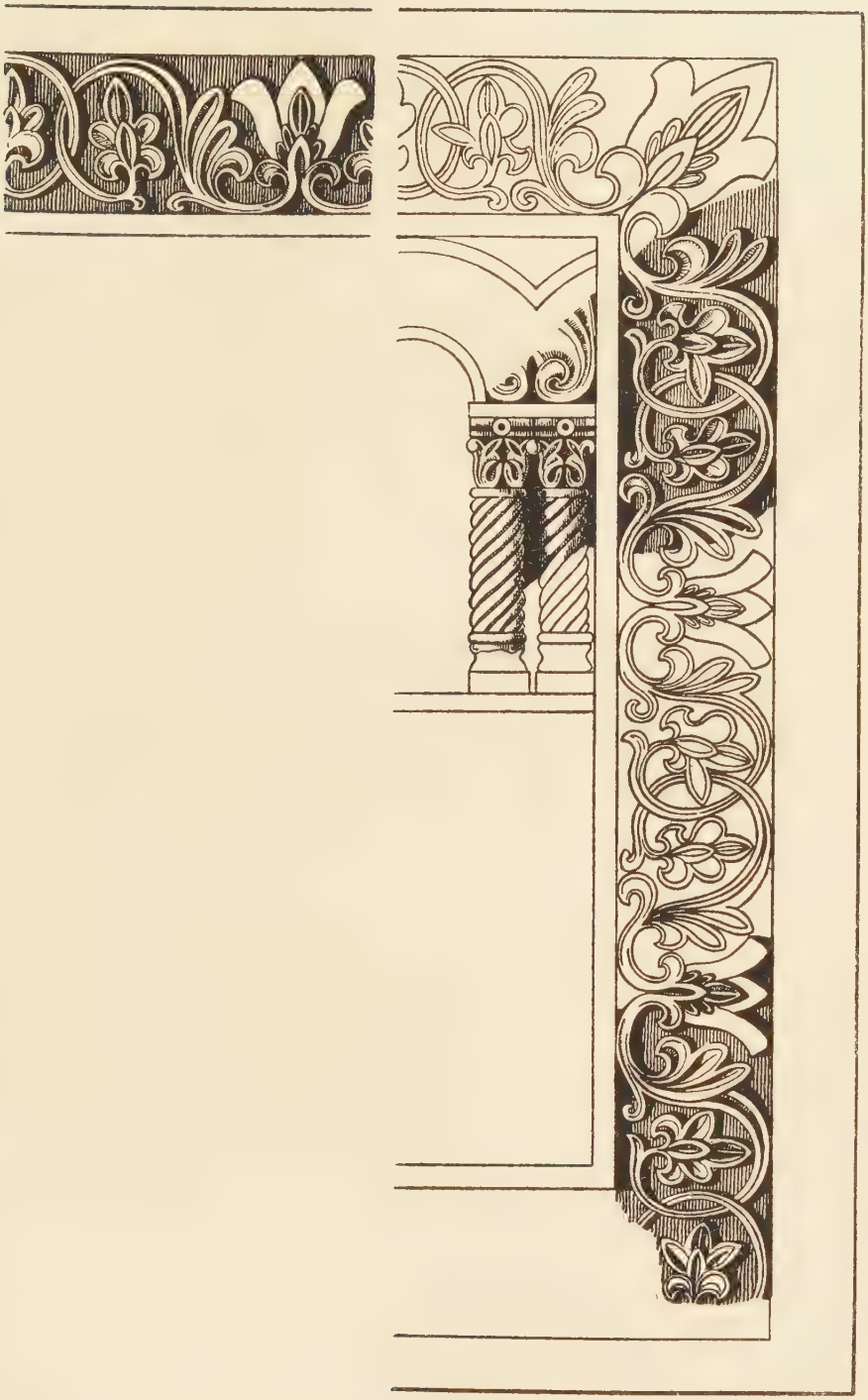


Fig. 46. Border fragments from the Forecourt

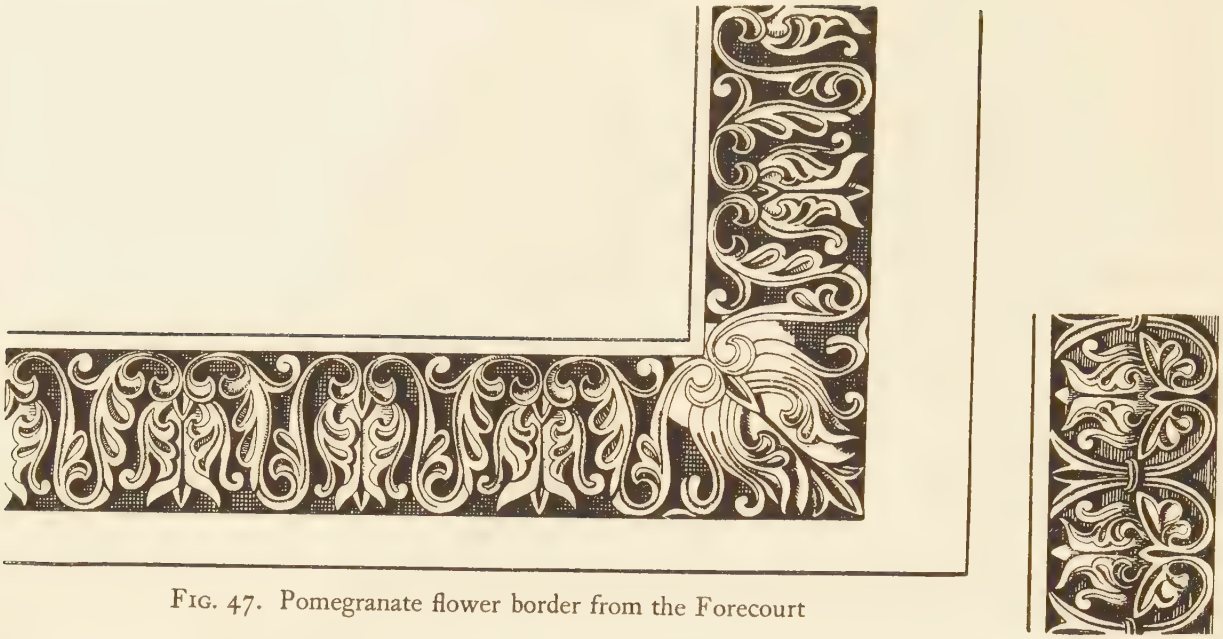


Fig. 47. Pomegranate flower border from the Forecourt

Fig. 48. Linked pomegranate flowers from Forecourt

Fig. 50. Grape-flower border from Forecourt

Fig. 49. Palm-branch border from Forecourt

at points of junction one-third of the way along the upper borders. The inner scrolls met each other in the middle points and probably formed a full circle. A feature of the scrolls in both groups is the whip-like movement with which the tendrils filling the triangular spaces between the circles intertwine with the main stems or with the circles themselves. These tendrils end in various combinations of vine leaves, half-palmettes, grape bunches, or groups of three grapes; occasionally in a trefoil (Fig. 42).

The main feature that distinguishes one border design from another is the motif that fills the circles of the scrolls. These may be classified as follows.

Fig. 51. Vine leaves

Rosettes. Every panel in the central court has on one of its two sides a border in which the scrolls enclose a rosette of eight or six petals. In numbering the panels from the central court we have given the letter A to those which have this border.

Vine Leaves (Fig. 51). Of these there are three-lobed, four-lobed, and five-lobed varieties. One side of each of the forecourt panels has a border with a three-lobed vine leaf scroll (Fig. 40), which is thus the counterpart in the forecourt of the rosette scrolls in the panels of the central court. The intervening spaces are filled by tendrils carrying vine leaves and clusters of three grapes. The four-lobed vine leaf Fig. 51(*b*) occurs only once, in the border of panel 10 (Pl. VII). The five-lobed leaf, Fig. 51(*c*), is from panels 1 and 3 in the central court (Pls. I, II); it is also used in a medallion on panel 10A (Fig. 32).

A more elaborate five-lobed vine leaf, Fig. 51 (*d*) and (*e*), is used with a bunch of grapes or cluster of three grapes superimposed upon it alternately on one of the forecourt screens (Fig. 41 and Pl. XX, bottom). The grapes are supported on an independent stalk.[1]

[1] Cf. also Fig. 61 (*b*) and (*d*), and a motif on the carved cedar consoles from the Aqsa Mosque: Creswell, *op. cit.*, Vol. II, p. 134, Fig. 139; and numerous examples in the façade of Mshatta.

The stem of this scroll, the richest of the whole series, is diversified by horn-like sheaths which encase the bifurcations. The scrolls themselves emerge from a biconical goblet. Fig. 51 (*f*) and (*g*) show a quite different form of leaf used in combination with bunches of grapes in two other panels of the forecourt and in panel 6 of the central court (cf. Figs. 42 (*a*) and (*b*) and Fig. 11, Pls. XX, top right, and V). This particular stylization of the vine leaf, with raised ribs and densely furrowed concentric veins drawn round a circular indentation between the lobes,[1] is a favourite one with the sculptors of Mafjar and is profusely used on a fragmentary plaster ceiling in the Palestine Archaeological Museum. The naturalistic, two-dimensional, effect produced by allowing the leaves here and there to hide some of the grapes in a bunch is noteworthy (cf. panel 15A above, Fig. 31 and Pl. XV).

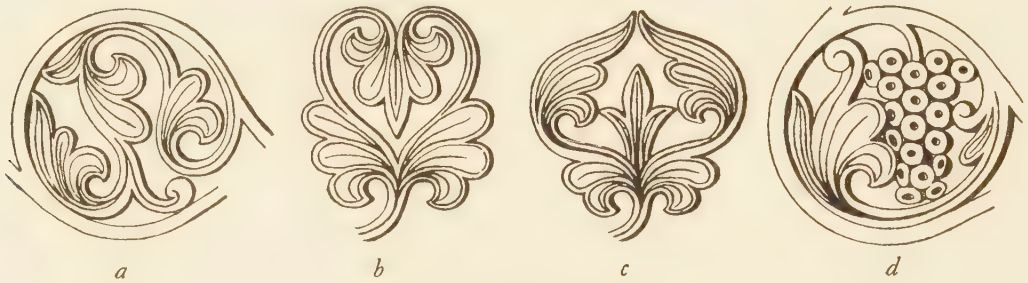


Fig. 52. Half-palmettes

Another fine grape border is that of panel 3 (Fig. 15 and Pl. II), where a vine leaf alternates with two naturalistically drawn bunches. The scrolls emerge from an amphora like those sometimes depicted on mosaic floors of the sixth century.

Acanthus Whorls. This approximately describes a motif which appears on screens in both groups (Figs. 24 and 43). The stem ends in an acorn set in a two-lobed calyx. The coil gives rise to three or to four folded acanthus leaves curling towards the centre. In both borders the intervening spaces are filled by vine tendrils with the usual group of three grapes or a leaf at the end.

Half-palmettes. Fig. 52 (*a*), (*b*), and (*c*) show three different adaptations of a self-developing half-palmette, all from the central court; (*d*) is a half-palmette with bunch of grapes from panel 7 (Fig. 27). All of these are combined with vine leaves and grapes in the intervening spaces of the scrolls. (*a*), (*b*), and (*c*) have a characteristic feature in common, the development of the tip of one half-palmette to form the stem of a second. In (*a*), from panel 9 (Fig. 14), the process is twice repeated; (*c*) from the border of panel 11 (Fig. 20) occurs also in the central field of panels 8A (with a pomegranate in place of the central trefoil) and 14A (Figs. 28 and 29). A form related to (*b*), from panel 15 (Fig. 7), is commonly used to unite the ends of opposing scrolls (e.g. in the borders of 3A, 13A, and 15A; Figs. 22, 6, and 31).[2]

[1] Cf. a Sasanian vine leaf from Taq-i-Bustan: Herzfeld, *Am Tor von Asien*, Pl. LIV.

[2] On the development of this motif from Sasanian sources see Dimand, 'Studies in Islamic Ornament', *Ars Islamica*, Vol. IV, p. 315. The same forms appear hardly changed two centuries later in the Spanish Umayyad sculpture of Madinat az Zahra. Cf. Terrasse, *L'art hispano-mauresque*, Pls. X, XII, &c.

Fig. 53 represents a curious leaf, perhaps suggested by the Sasanian wing motif, which appears only on panel 14 from the central court (Pl. X and Fig. 10). Another peculiarity

Fig. 53

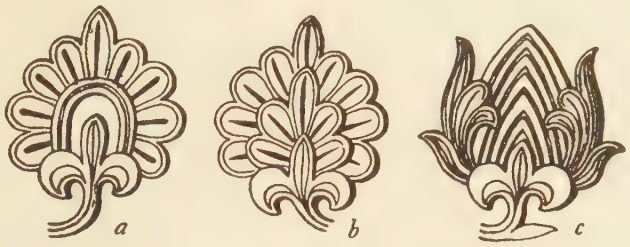


Fig. 54. Flowers on trefoil stems

of the border in this panel is the sprinkling of grapes that are set in pairs on each of the leaves and at intervals along the stems of the scroll; the stem itself is unusual in having a flat surface with a raised rim along one edge.

The remaining scrolls enclose single fruits or flowers. Fig. 54 shows three varieties of composite flowers resting on a trefoil calyx. (*a*) and (*b*) from the forecourt (Figs. 44 and 45 and Pl. XXI) are derived from the Assyrian lotus flower, and may be compared with designs in the seventh-century mosaics of the Dome of the Rock.[1] (*c*) is from panel 5 in the central court (Pl. IV).

Fig. 55 gives four motifs resting on an open split-palmette. The pomegranate of (*a*), with its seeds exposed, occurs in panels 8 and 16 of the central court (Figs. 8 and 9 and Pls. VI and XVII) and has the same form as the pomegranate on panel 8A (Fig. 29). (*b*) is a composite flower which alternates with the two lotuses of Fig. 54 (*a*) and (*b*) in one of the borders from the forecourt (Fig. 15 and Pl. XXI). (*c*), from panel 2 in the central court (Pl. I), is a near relation of (*b*); and (*d*) (panel 12, Pl. VIII) is perhaps a lily.

We now come to those border patterns which consist of floral or semi-floral motifs not enclosed in scrolls but resting on a series of arched stems forming a continuous chain round the sides of the panel. This type of border pattern is found only in the forecourt.[2]

The usual arrangement is for two different motifs to be used in alternation, one of them being, in several cases, a three-pointed leaf with a collar and divided stems (Figs. 48, 50). In one border there is a seven-lobed palmette (Fig. 49).

Fig. 55. Flowers on split-palmette stems

[1] Cf. Creswell, *op. cit.*, Vol. I, Fig. 264.
[2] Figs. 39 and 46–50 and Pls. XVII and XVIII.

Fig. 56. Balustrade posts, acanthus patterns

The rest are composite forms (Figs. 39, 47, 48, and 50) for which we cannot easily find names, many having no connexion with nature. We can, however, recognize in Figs. 47 and 48 two varieties of a form of pomegranate flower commonly employed by Umayyad artists;[1] in Fig. 47 the flowers are linked by two self-developing half-palmettes. Of the motifs forming the border of Fig. 39 (Pl. XVIII) one is composed of folded acanthus leaves forming a tulip-shaped flower; the other may represent a bunch of grapes; both are supported on trefoils with divided and arched stems.

The border drawn in Fig. 46 (Pl. XVII, third row) is somewhat unusual. The principal motif consists of a five-lobed palmette placed on a kind of tulip and supported on a trefoil stem. The stem splits and develops symmetrically by way of half-palmettes into two composite five-lobed leaves. The surviving fragments show little concern on the part of the sculptor in the adjustment of his pattern to the dimensions of the border; only one of the corners has been partially preserved, but it is clear that different corners were occupied by different portions of the pattern.

IV. *Decoration of Posts.* The last group of designs which we have to describe are those which decorated the free sides of the posts in both balustrades (Figs. 56–63 and Pl. XXII).[2]

The designs fall broadly into two classes. The first are mainly geometrical and include only the simplest flower or leaf forms; the second employ richly developed floral motifs. We can say little about the distribution of the two types of pattern, but most of those posts in which fragments of both faces are still united have an elaborate design on one side and a simpler one on the other.

A glance at Figs. 56–63 will show that the designs are similar in general character to those of the panels and borders, but adapted to the dimensions of the space they have to fill.

The approximate height of the decorated panel on each

[1] Compare Fig. 48 with the covering of a tie-beam in the Dome of the Rock, shown in Creswell, *op. cit.*, Vol. I, Pl. 27 *b*; or Fig. 47 with *ibid.*, Pl. 26 *b* and 27 *d*; in both these cases the stems develop into half-palmettes.

[2] On Fig. 2 (*a*) may be seen some of the minor ornaments employed (i) round the square base of the knobs; (ii) along the narrow vertical strips where the engaged sides of the posts projected in front of the panels.

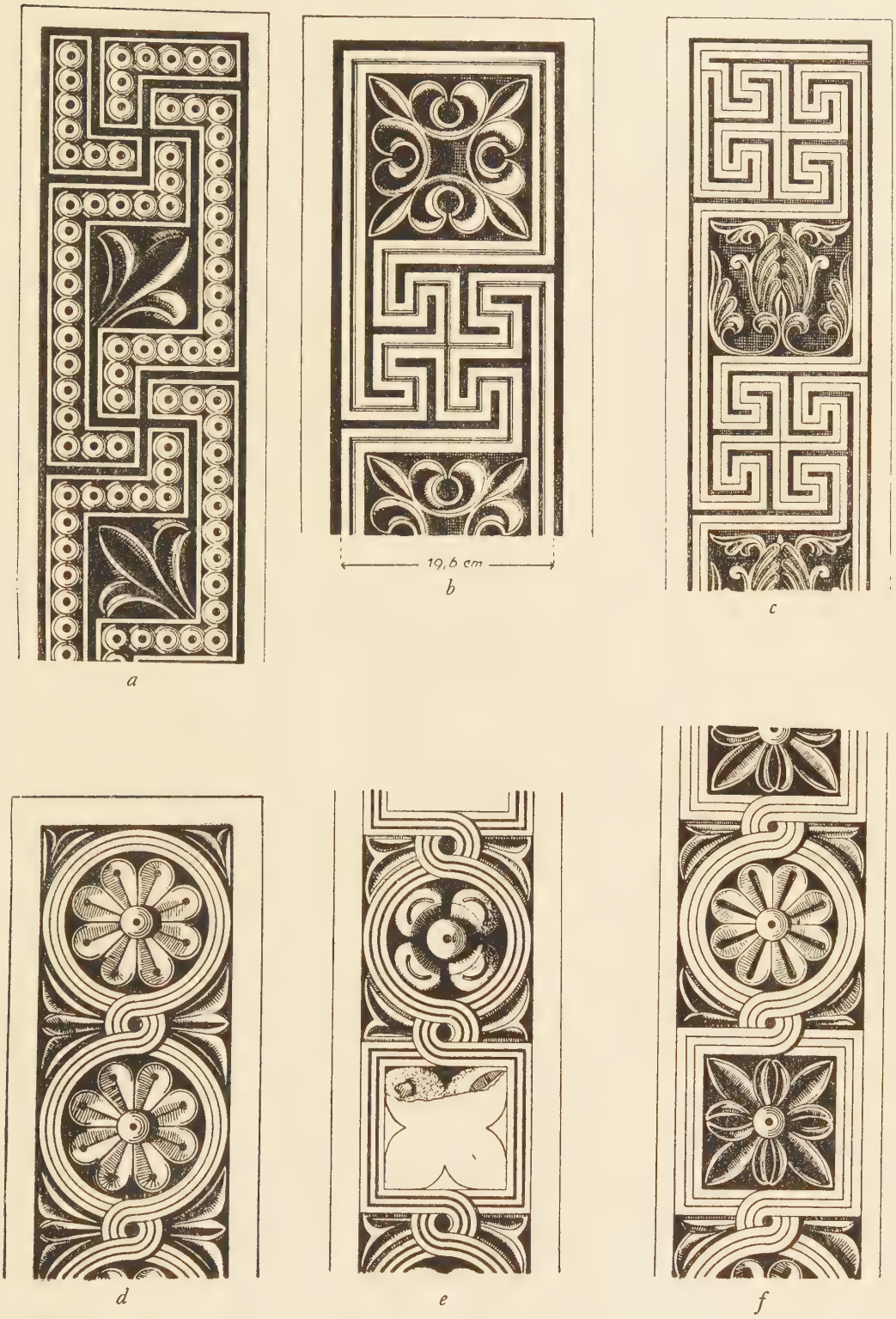


FIG. 57. Balustrade posts

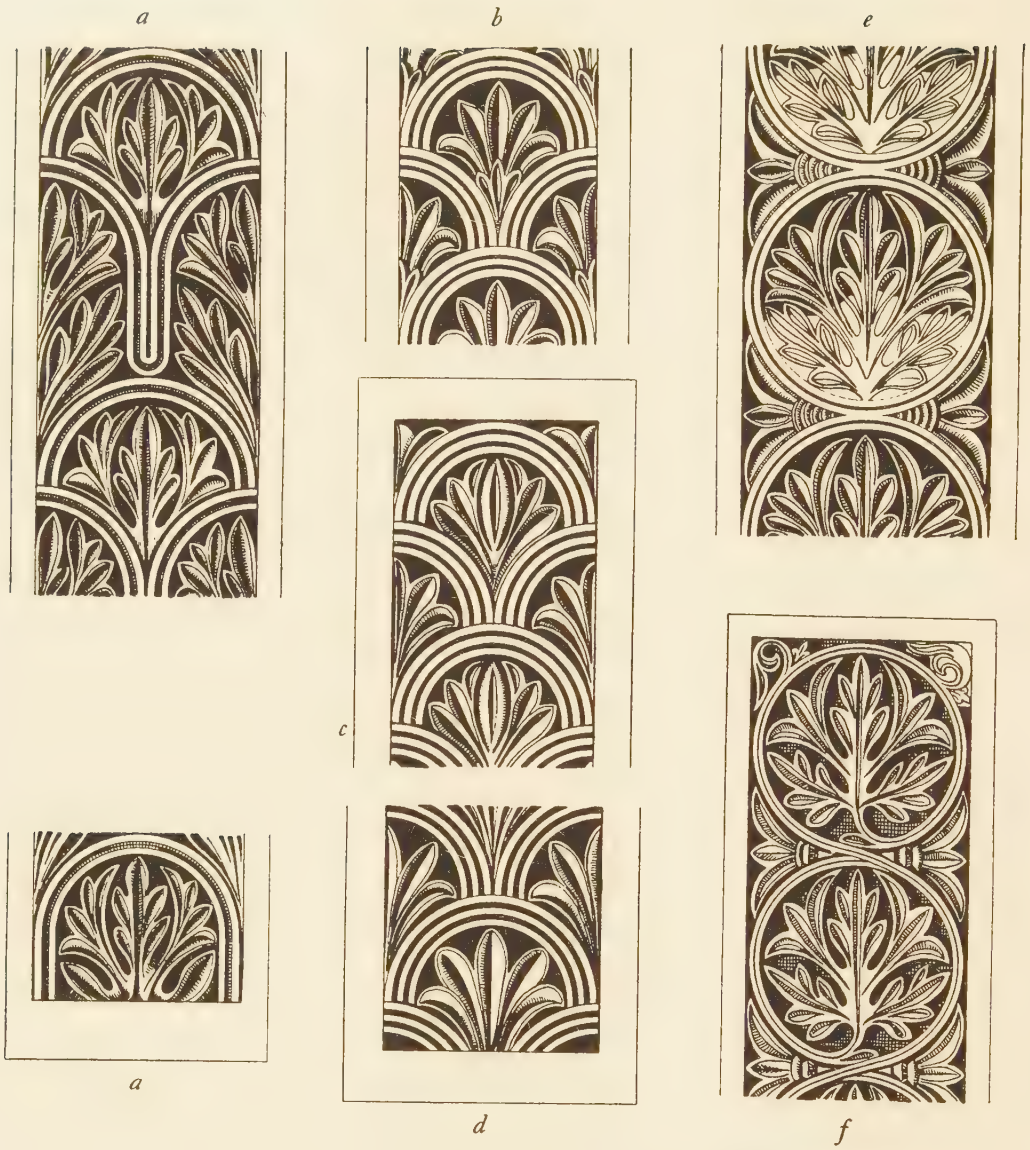


FIG. 58. Balustrade posts, acanthus and palmette designs

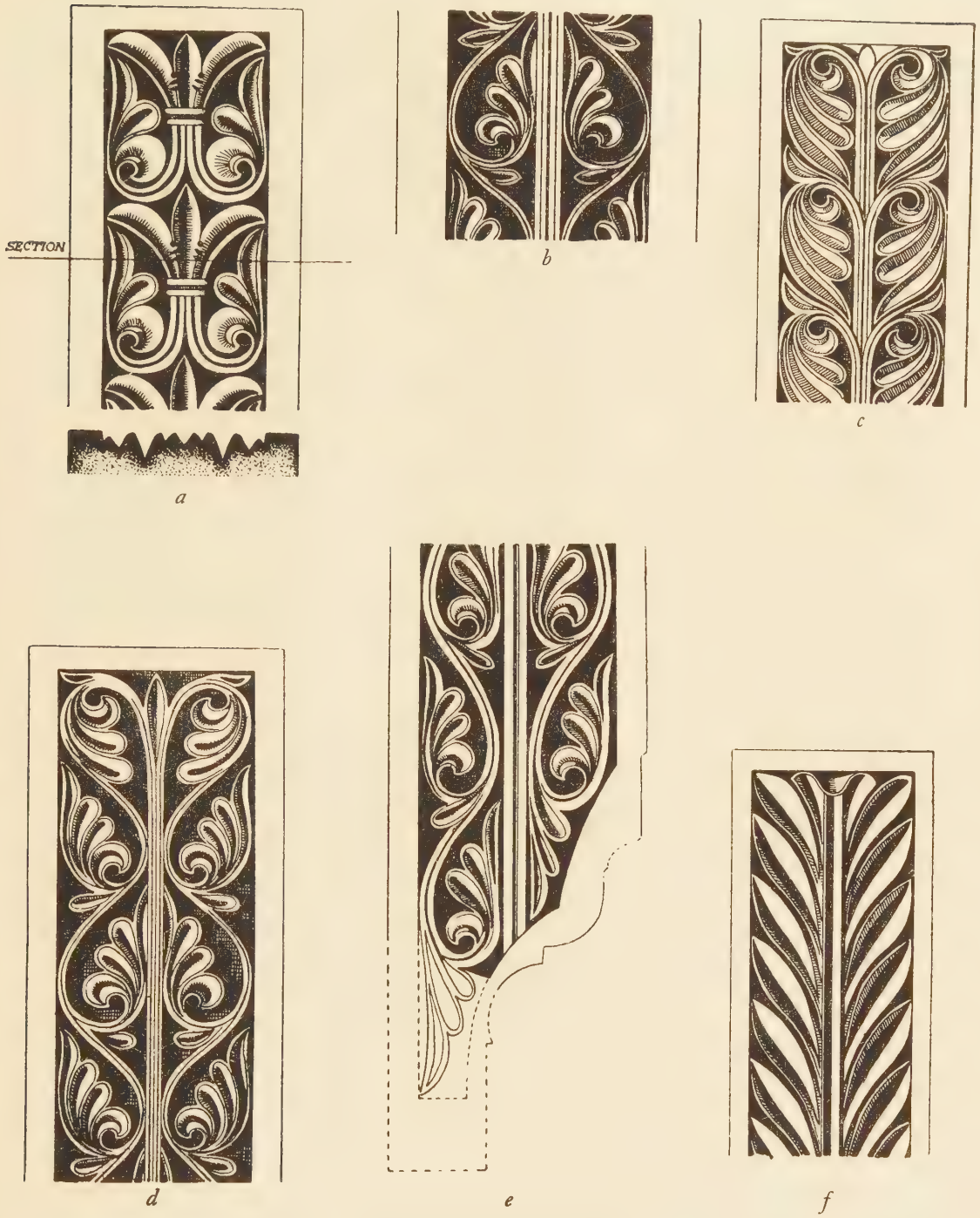


FIG. 59. Balustrade posts, half-palmettes

post is 1·05 m.; the width varies between about 15 and 23 cm. On the posts which rested against a column the decorated surface was constricted towards the bottom by the progressive projection of the column base mouldings (Fig. 1). Many of the patterns appear on two or more posts, but usually with slight variations of detail or of scale. In the figures we have included some of these minor variations.

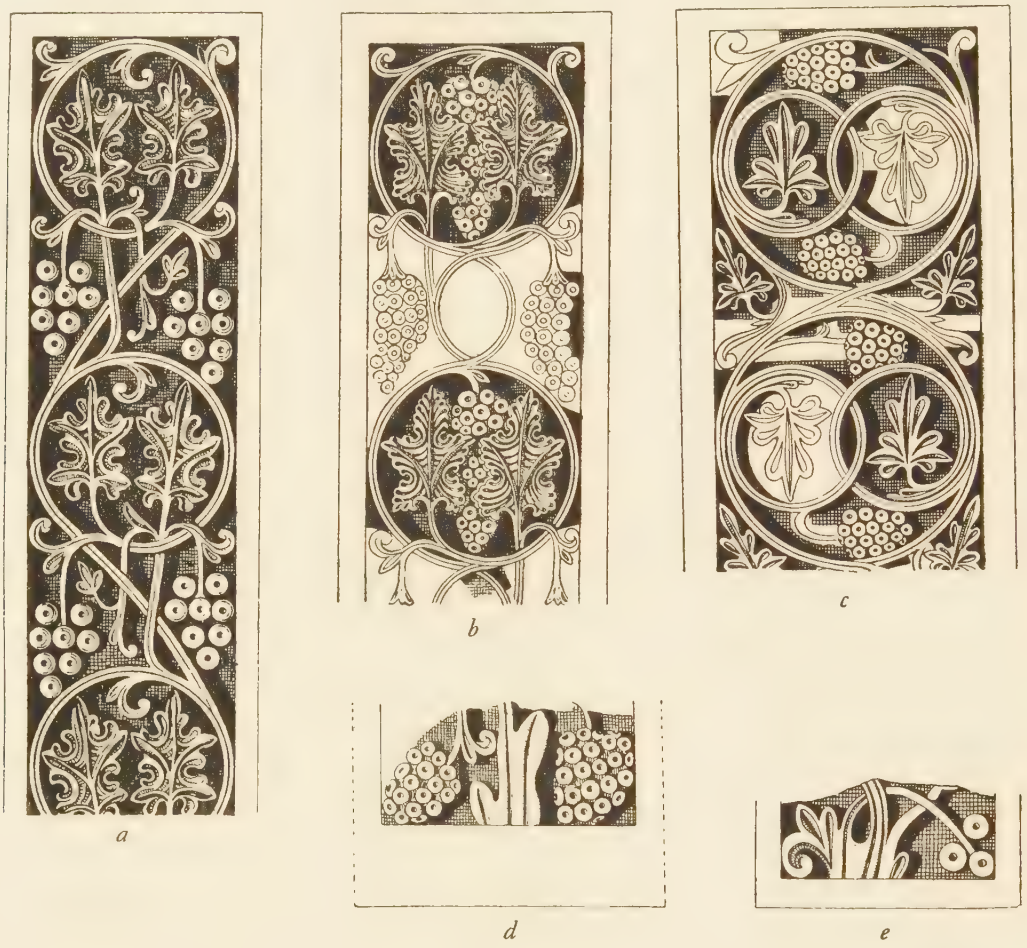


Fig. 60. Vine scrolls

On Fig. 57 are grouped six designs employing swastikas or linked panels. The only addition to the types represented on the screens is the motif in the compartments of (*c*), where two wing-like half-palmettes surmount a flower-like composition of similar elements.

Fig. 58 shows some imbricated and other patterns using acanthus and palm leaves, whole or halved. The acanthus also appears on a large number of different fragments, sprouting symmetrically from a stiff central shaft (Fig. 56).

On Fig. 59 we group a number of different designs using trefoils and half-palmettes variously arranged about a vertical axis. Fig. 59 (*f*), which may be described as a corn-ear, is the only pattern of its kind.

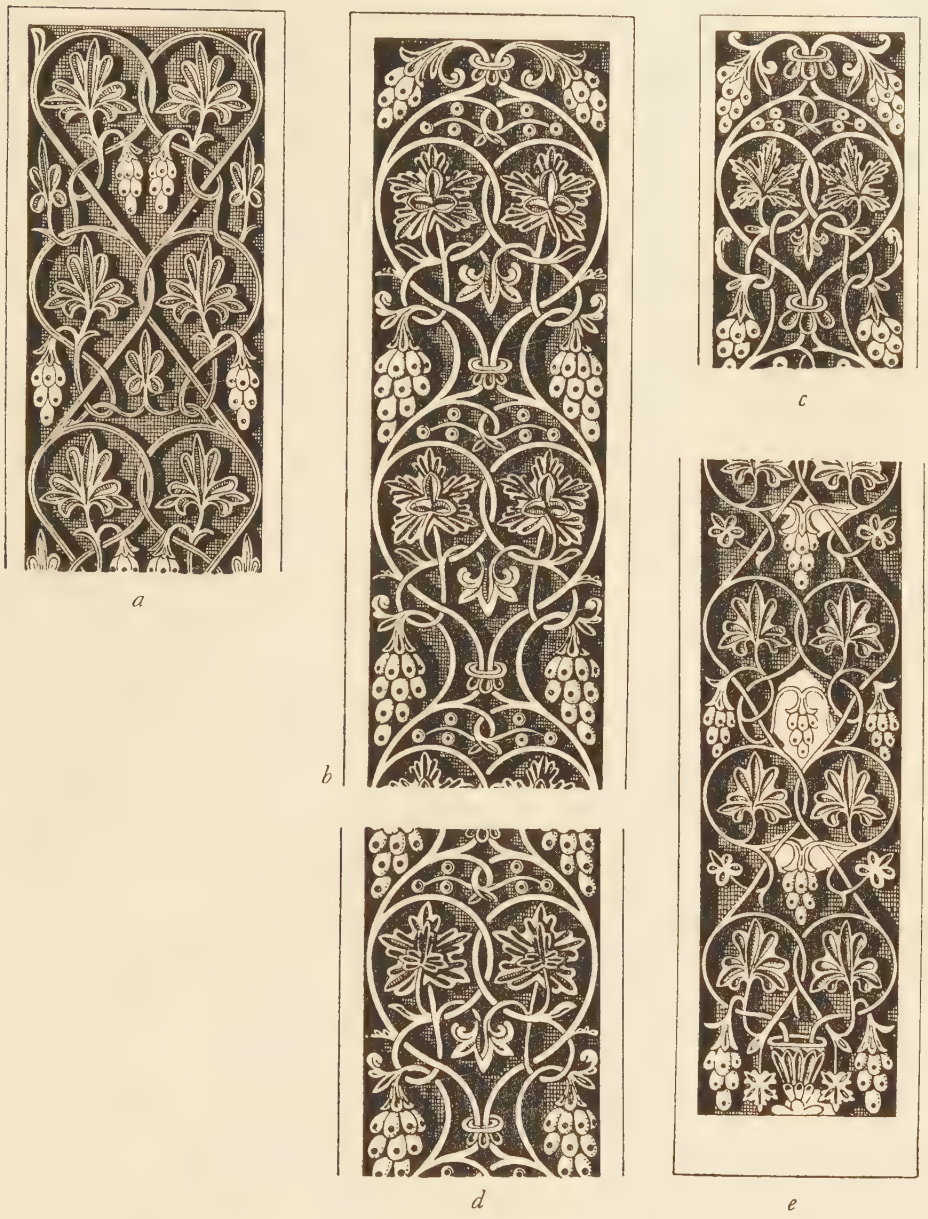


Fig. 61. Linked vines

All of these belong to what we have described as the simpler type of design. On Figs. 60–63 are grouped a series of more elaborate floral patterns. These consist of vine scrolls, single or double (Figs. 60, 61); twisted vine stems (Fig. 62); and pomegranate fruit or blossom designs (Fig. 63) arranged in scrolls or on chains of self-developing half-palmettes, or in a kind of hybrid 'agglutinative' construction recalling some of

Fig. 62. Twisted vines

the mosaic designs of the Dome of the Rock or Church of the Nativity at Bethlehem (Fig. 63 (*a*), (*b*)).

The designs are of the same style as those of the panel borders, from which they differ mainly in their vertical movement and in a certain elaboration which the greater width of the field made possible in some cases.[1] Two features which are specially adapted to the vertical pose of the designs are absent from the border panels. They are (i) the stiff vertical rods which brace up the axes of Figs. 56 and 59 (*b*) to (*f*); and (ii) the twisted stems of Fig. 62.[2]

[1] For example, the symmetrically linked vine stems of Fig. 61 do not appear amongst the panel borders. Cf. the linked vines on some of the carved cedar panels from the roof of the Aqsa Mosque (Creswell, *op. cit.*, Vol. II, Pls. 25, 27).

[2] Amongst these the Sasanian vine leaf of Fig. 62 (*c*), on a lifelike stalk, is worthy of note.

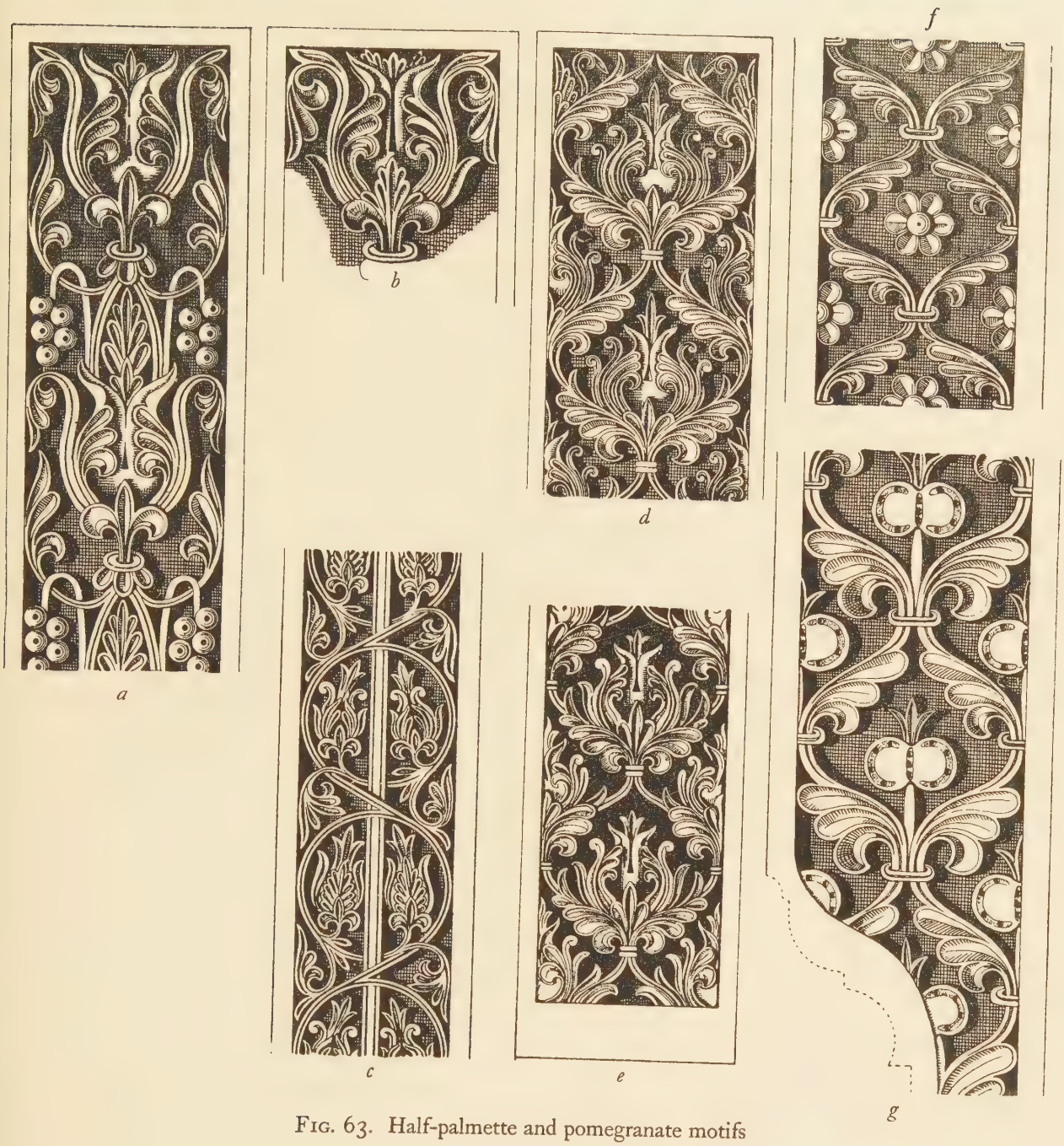


FIG. 63. Half-palmette and pomegranate motifs

The designs of Fig. 63 (*d*), (*e*), (*f*), (*g*) are extensible sideways as well as along the length of the field, as are Figs. 58 (*a*)–(*d*). The pomegranate flowers in Fig. 63 (*d*) and (*e*) belong to the same class as those of Figs. 47 and 48.

Fig. 61 (*b*) and (*d*), which show two independent leaves, a trefoil and a small vine leaf, placed over a larger vine leaf, may be compared with Fig. 51 (*d*) and (*e*) (p. 39 above).

The Execution

This completes our account of the decoration of these balustrades. The discovery of two half-finished panels in the workshop (p. 4 above) throws some light on the procedure of the sculptors in laying out and executing the designs.

Their drawing equipment included a ruler and compass and a taut string. Lines were made with a scratching-tool or with a blunt point, either guided by a ruler or compass or used freehand. The main axes of the panels were marked by a flick of the string, first rubbed with red colouring matter; straight lines ruled with the point were generally coloured too. The main axes and margins were indicated before the plaster had quite hardened, for the string left a perceptible impression on the surface.

The preliminary excavation of the background was done with a narrow triangular point. For the modelling a knife or broad chisel was used. Circular holes, which were required for the centres of knots, or for the indentations of certain forms of vine leaf, were drilled with a blunt-tipped drill. The drill was also used to finish off the axial vein of certain forms of leaves and to place a dot in the middle of grapes.

It will be seen from the drawings that the scale of the repeating designs is seldom exactly adjusted to the size of the panel. Sometimes the unit of the pattern occupies an exact fraction of the height but not of the width, sometimes, but more rarely, the reverse. In any case the artist seldom hesitated to cut short the pattern along any line convenient.[1]

The half-finished panel 14 (2) discovered in the workshop (Pl. XII) shows how the pattern of Fig. 10 (Pl. X) was laid out. It may be worth describing this. The slab of plaster, still slightly damp, was laid flat on a piece of coarse woven material spread on the floor.[2] The artist first marked the horizontal axis of the screen by a flick of the string, and ruled the outlines of the borders and central panel with a scratching-point. Two vertical scratches across the top and bottom borders marked the axes of the central scrolls in each. The main field was then divided into eight equal horizontal strips by six lines drawn parallel to the axis. These were scratched with the point and coloured red.

This completed the first stage; the next was carried out with the compasses. Starting from the mid-point of the panel the centre line was nicked off into lengths equal to the side of an equilateral triangle inscribed between the horizontals.[3] This was done with the compasses fixed to a single radius, the pivot being moved at each step and placed on the arc just made. From the same points intersecting arcs were notched on the horizontals above and below, giving the tips of equilateral triangles based on the axis of the panel. From these the process was repeated until the top and bottom borders were reached. The

[1] But see p. 57 below.

[2] The impression of cloth can also be distinguished on other panels.

[3] This was not an exact fraction of the length of the panel, but left a remainder over at each end.

points were then joined up with red lines, the whole surface being thus set out with a trellis of equilateral triangles based on the horizontals.

With compasses set to one-fifth of their previous radius the draughtsman then divided up the diagonal sides of the triangles into five equal parts. As before, the compasses were fixed and the pivot was moved forward at each step; the whole process was carried out from the bottom upwards.

This was as far as the work had been taken when it was abandoned (Pl. XII). It is easy to see that the next step would have been to draw parallels diagonally through the points

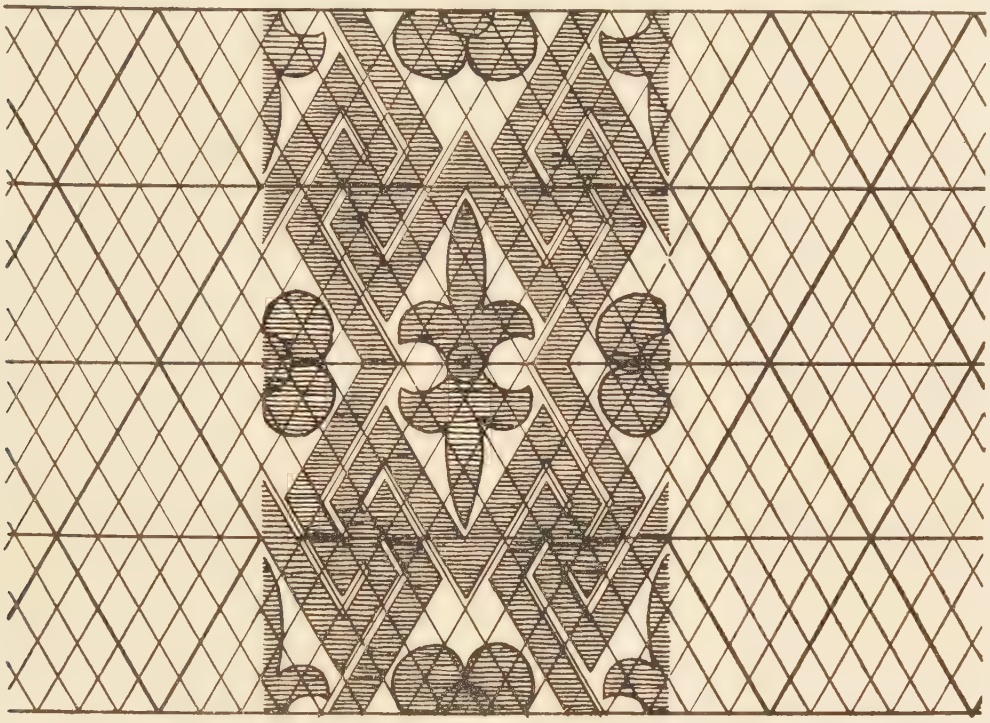


Fig. 64

just marked. As may be seen from Fig. 64, the main triangles give the outlines of the diamond-shaped compartments while the closer parallels give the axes of the hollows between the arms of the swastikas.

On the reverse side of the same screen the design of Fig. 28 was in preparation (Pl. XIII). Here the excavation of the pattern had already started and many of the guide lines had been cut away, but we can still see that the first steps were the same. The outlines of the decorated surface were demarcated with the point and ruler, also the vertical fillets between the side borders and the central panel; but the string was used for the horizontal fillets. All vertical lines were scratched. The details of the design were set out with ruler and compasses (the latter fitted with a blunt point), and with a blunt point used freehand. The main axes of the ten-pointed figure which forms the basis of the medallion were ruled with the point; but it does not appear how these lines were constructed.

One other pair of duplicate screens has survived in fairly large part; they are the screens

numbered 15 and 15 (2) (Pls. XIV–XVI). By comparing the two sets of fragments it can be seen that the duplication is not mechanically exact. For example, the vine festoons on Pls. XV and XVI (below) differ from each other in several details. The reverse designs, too, Pls. XIV and XVI (above), show numerous variations in detail and differ, in particular, in the relation of the pattern to the field.

These variations in the layout of what were essentially identical designs show the need for caution in drawing conclusions about the geometry of the more fragmentary screens. Still it is possible, and may illustrate the working methods of the sculptors, to classify on a geometrical basis a number of the identifiable designs.

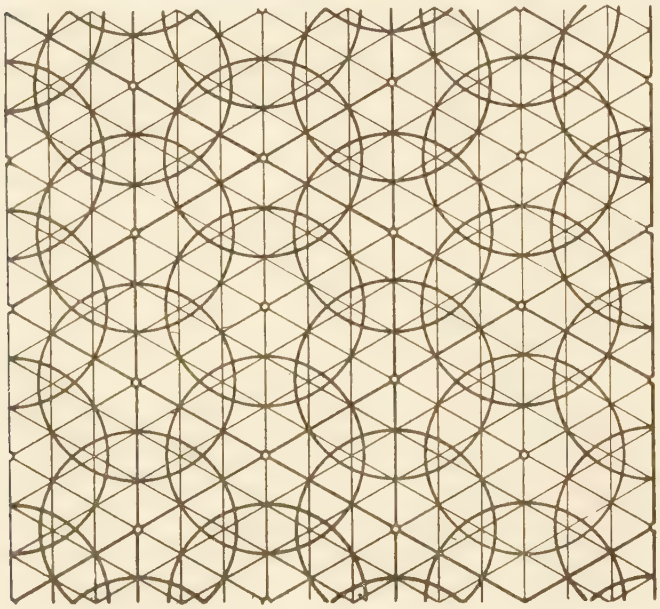


Fig. 65

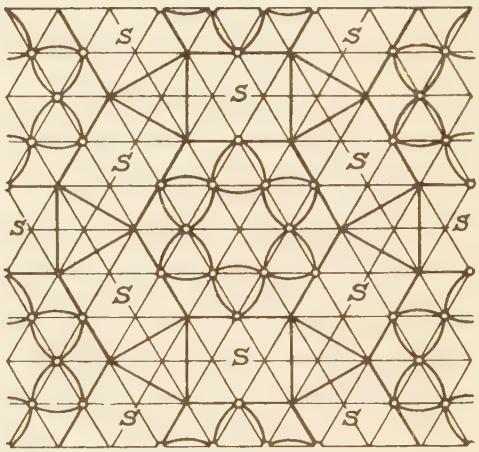


Fig. 66

In many of the designs one important factor for recovering their layout is missing: we cannot always tell what was the original height or width of the panels they filled. This means that while we may recover the internal geometry of the patterns with certainty, we can only guess, in such cases, how the field was initially subdivided to take them. As a general rule, however, we may say that it was the height of the panel which determined the scale of the design.

The network of equilateral triangles which we have seen used in panel 14 formed the basis of at least five other designs (Figs. 12, 13, 23, 24, and 25). In four of these the base-lines were drawn horizontally, but in Fig. 23 they have to be drawn vertically. Of these designs the most complex are Figs. 23 and 25, the geometrical layout of which is shown in Figs. 65[1] and 66.

A still larger group of designs required the field to be divided into squares either parallel

[1] The analysis of a design similar to our panel 13 given in Creswell, *op. cit.*, Vol. I, p. 140, Fig. 85, stops short of the final triangulation giving the radius of the circles. The design of panel 4, Fig. 24, requires the same triangulation but on horizontal base-lines.

to the sides or tilted forty-five degrees. To the first class belong the straightforward panelled designs, with circular, square, or lobed compartments, of which Figs. 3, 5, 6, and 7 are examples. In each of these patterns a straight grid of squares with sides equal to one-eighth of the probable height of the panel gives the outline of the compartments, their centres, and the centres of the knots linking them (Fig. 67). Panel 12A (Fig. 4) fits the same grid with the centres of the small knots lying along the diagonals or on the

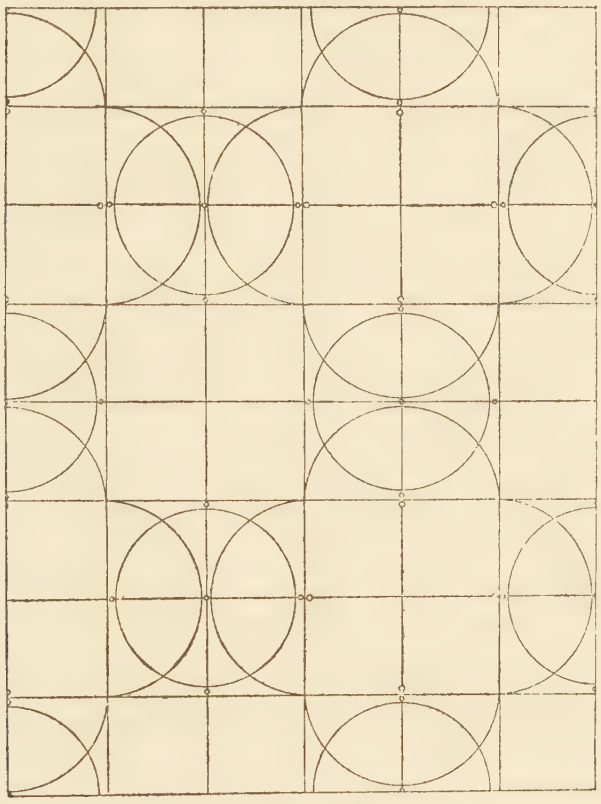


Fig. 67

corners of the squares. The initial subdivision of the field would in these cases have been into eight horizontal registers, and the total height of the field about 65 cm.

The design of panel 3 (Fig. 15) was drawn on a grid of straight squares with sides equal to one-fifth of the height of the panel.[1] In laying out the grid the artist started from the left edge of the field, and was able to get in nine vertical rows of squares with a fraction over at the right-hand side.

A grid of squares set diagonally will give the centres of the circles and arms of the

[1] Although well represented by fragments (Pl. II) the solution of this design presented exceptional difficulties due in part to variations in scale and articulation between the different swastikas. Some difficulty must have been felt even by the designer, for the pattern imposes certain differences in the slope of the skewed swastikas as well as variations in the shape of the floral compartments. The surviving fragments represent two duplicate screens, and include four different motifs for filling the rectangular compartments. In drawing Fig. 15 we have used only two of these, assuming that in each screen a single pair of motifs was employed.

swastikas in such designs as Figs. 20 and 21; Fig. 9 was also presumably laid out diagonally. The radius of the circles and width of bands in these patterns could be reached empirically.

Of the patterns based on squares the most complex are Figs. 14 and 22. Of these the latter is drawn on a grid of straight squares one-sixth the height of the panel, with their diagonals. The centres, *A*, of the big circles fall on the outer corners of four such squares placed together. The centres, *B*, of the arcs that form the interlacing lozenges lie on

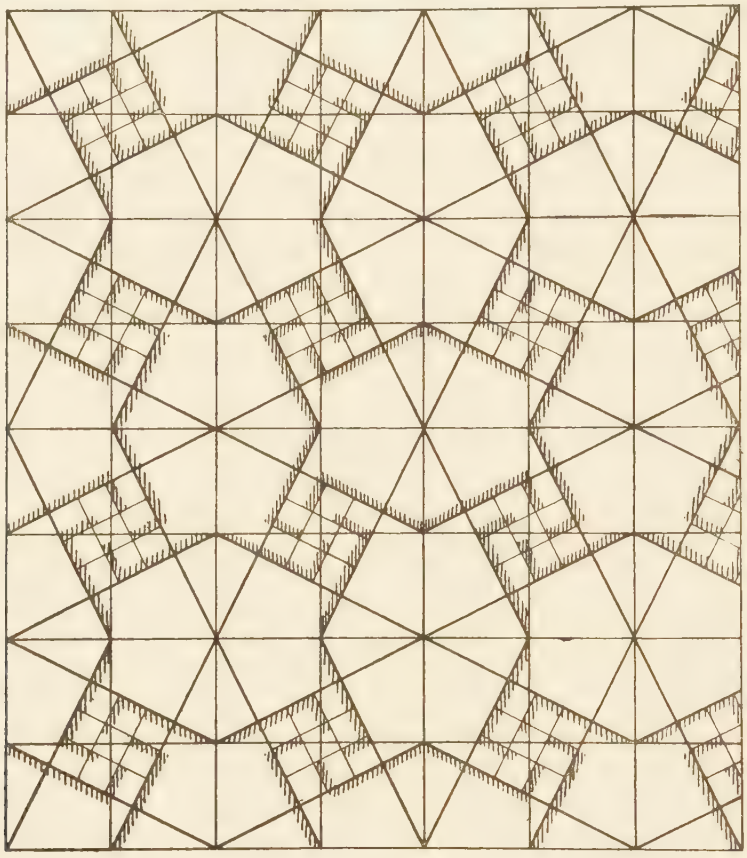


Fig. 68

the diagonals at a distance from *A* equal to half the side of the original squares. The radius of the arcs drawn from these centres is fixed empirically to make the axes of the straps intersect on the middle of the sides of the squares *AAAA*. In laying out his grid the artist seems again to have started from the left side of the panel.

The framework for panel 9 (Fig. 14) is shown in Fig. 68. It consists of a straight grid of squares one-eighth of the height of the panel. The slope of the straps forming the design is obtained by joining the opposite corners of two adjacent squares. The lines so drawn produce a network of lozenges separated by squares; division of these squares into nine gives the layout of the swastikas, as shown in Fig. 68. In the final result the diamonds in the middle row are smaller than those above and below.

The textile designs of Figs. 16, 17, and 18 require the field to be set out in small squares

corresponding to the width of the straps and of the spaces between. In Fig. 17 the unit of pattern occupies 100 such squares, ten in either direction; but in 16 and 18 the unit is rectangular, and fills ten squares horizontally by eight vertically.

So far as we can judge, the guide lines used in the layout of all these designs must sometimes have indicated the axes of the channels to be excavated, and sometimes the axes of the straps to be reserved; but most often, we believe, guide lines fell on the boundaries between the straps and the channels.

Conclusion

The decoration of these balustrades is a mixture of diverse elements which throw some light on the character of the makers and their times. It is evident that they were experienced and skilful craftsmen, for the drawing on the whole is masterly[1] and the carving delicate and assured (Pl. XXIII). The great multiplicity of the designs and their variations in detail reveal an abundance of ideas and exuberant vitality in their expression. At the same time we can detect here and there in the choice of patterns and in their juxtaposition a naïvety, or even a crudeness, which suggests the experimental essay of a style in formation rather than the work of maturity. The elements which give rise to this impression may briefly be indicated.

At the outset we are faced with an innovation, the structural use of plaster by Palestinian builders. The form of the balustrades was traditional, following the posts and panels of the chancel screens in innumerable Christian churches. But the material was a novelty in a country where builders had for centuries hewn their requirements from the limestone of the neighbouring hill-sides[2], or for special purposes had imported marble from abroad. In the churches the screens were normally of limestone or marble; and in Mafjar itself the balustrade which surrounded the stairs leading to the bath or *sirdab* was of the local bituminous limestone.[3] Fragments of marble screen panels have also been found in the ruins.

The home of carved plaster was Mesopotamia, where it had been used for decorative purposes since the first century A.D.[4] In Egypt gypsum plaster had been used since the early dynastic period, but only as a ground for painting, not for sculpture.[5] It is therefore with Mesopotamia that we must connect the first appearance of carved plaster in Palestinian architecture.

Nevertheless, the character of the ornament suggests that the sculptors were men of the country. That Syrian workmen should have learnt to manipulate the much easier material of Mesopotamian industry need not surprise us. The development of

1 Though rare mistakes did occur; witness the arcaded panel, presumably spoilt, which was used to make up panel 2 (p. 3 above). On the half-finished duplicate of panel 14A (Pl. XIII) the scroll in the left half of the bottom border is wrongly drawn; and a similar mistake may be detected in the same part of panel 1A (Fig. 16 and Pl. I).

2 Gypsum, as it happens, can be found locally. In the Jordan Valley there is evidence of at least one quarry being worked as early as the Middle Bronze Age. See Ben-Dor in *QDAP*, Vol. XI, pp. 93 ff.

3 *QDAP*, Vol. V, p. 136.

4 Debevoise, 'Origin of Decorative Stucco', *American Journal of Archaeology*, Vol. XLV, pp. 45 ff.

5 Lucas, *Ancient Egyptian Materials*, p. 76.

Mesopotamian plaster ornament can be followed, in such sites as Hira, Ctesiphon, or Kish, from Parthian to Abbaside times.[1] Comparison shows that, however freely the Mafjar sculptors may have borrowed individual motifs, as well as technical methods, from the workshops of Mesopotamia, their work remained, in spirit and in substance, Syrian through and through.

This is not to say that their debt to neighbouring lands was limited to some technical methods and a selection of new patterns. The ease with which plaster could be carved was itself an invitation and encouragement to add to and enrich the traditional stock of ornament. It is clear that the artists who designed these balustrades commanded a wider range of motifs, and handled them with greater freedom and boldness, than did their predecessors who had carved the lintels, chancel-screens, window grilles, pulpits, or sarcophagi of pre-Islamic Syria. The greater range of expression which increased facility brought within their powers was a clear debt owed by Palestinian craftsmen to their contact with Mesopotamian industry.

The conditions which had led to the introduction of new materials and methods had also encouraged the dissemination of ideas. It is easy to see that the patterns brought together, for example, in Figs. 37, 47–50, and 63, owe more to Sasanian stucco, textile, and metal-work ornament[2] than they do to indigenous Hellenistic sources.

The fact remains, none the less, that the great majority of the designs were drawn from the traditional Hellenistic stock, long familiar to the sculptors and mosaic workers of Palestine and Syria. Few of these patterns are peculiar to any one local style. Many of the geometrical schemes of our panels and posts, especially those with swastikas, linked square and circular panels, or combinations of triangles, hexagons, and squares, are as closely paralleled in the carved wood and stone decoration of early Coptic churches as they are in the mosaic floors of Christian Palestine. The same may be said of the pseudo-floral motifs;[3] but we should not be justified in inferring from those the presence of Egyptian workmen. It is clear, on the contrary, that the most characteristic and persistently recurrent features of our screens, the grapes and naturalistic vine leaves, the scrolling vine stems, the vases, baskets, and leafy stems from which the scrolls emerge, and the acanthus whorls of Figs. 24 and 43 are all quite normal Syrian motifs. It need not, therefore, be supposed that foreign sculptors were engaged on this work.

Nevertheless the decoration displays a mixture both of motifs and of styles. In a single panel a spray of freely drawn vines or a naturalistic vine leaf may be pressed against a

[1] For Hira see Talbot Rice, 'Oxford Excavations' in *Ars Islamica*, Vol. I, pp. 58 ff., Figs. 8–15. For the other sites, Pope's *Survey of Persian Art*, Vol. I, ch. 30 and Pls. 171–8.

[2] Cf. the composite rosettes of Fig. 37 with the textile motifs depicted on the reliefs at Taq-i-Bustan: Herzfeld, *Am Tor von Asien*, pp. 124 ff., Figs. 33, 37, 38, &c. The split palmettes and the trefoils which form the calyces of flowers and fruit in Figs. 48, 50, and 63 are also Mesopotamian; cf. a composite lotus flower from Tepe Hissar, *Museum Journal*, Vol. XXIII, Pl. CLXI; or a pomegranate from Kish, Pope, *Survey of Persian Art*, Vol. I, p. 609, Fig. 186 *b*; also Pl. 172A. For the self-developing half-palmettes of Fig. 52 we may compare motifs used on the stucco door-jambs of early Muslim houses at Hira: Talbot Rice, *Ars Islamica*, Vol. I, Fig. 10 with our Fig. 52 (*b*), Fig. 13 with our 52 (*c*).

[3] Cf., for example, the acanthus motif of Fig. 58 (*a*) with one which appears beneath the abacus boss of several Coptic capitals from Bāwīt. Chassinat, *Fouilles à Baoût*, Vol. I, Pls. LI–LIII; or our Fig. 59 (*b*)–(*d*) with *ibid.*, Pl. XC, 1; or our Fig. 35 with *ibid.*, Pl. LXXVI, 4.

mechanically drawn geometrical frame.[1] The straps of an interlacing design may surprisingly sprout into vine tendrils.[2] In one panel the vine leaves are drawn from nature, in another they are stylized.[3] Or the scale may vary from screen to screen, the unit of the pattern being anything from one-half to one-eighth of the height of the panel. Caprice, or indifference to logical consistency, is thus a characteristic of this decoration.

A fundamental dualism of method can also be discerned. There are two ways of decorating a panel of fixed dimensions: the first is to treat the panel as a frame and to design a complete and self-contained composition to fit it; the second is to choose a previously prepared design capable of indefinite repetition, and to use as much of it as the field will take. The former is the method of the portrait-painter or medallist; the latter of the tile-setter or of the wall-paperer of modern days. The advantage of the 'wall-paper' or 'infinite' type of pattern is that a given formula can be used for a field of any size; the disadvantage is that the units of pattern will seldom be an exact fraction of the surface to be covered, and the edges of the field may cut them along an awkward line.

The designers of the Mafjar screens followed both methods. In the central court the roundels of Figs. 28–32 are self-contained designs drawn specially to fit their panels; the rest are 'infinite' patterns employing stock formulae of universal application.[4] We do not mean by this merely that they are based on geometrical schemes capable of indefinite repetition. Such schemes had for centuries formed the basis of designs in every decorative art. But the common practice in applying the geometric patterns of Greco-Roman design was to divide the field at the outset into units which were an exact fraction of its area, convenient proportions being secured by adjustment of the borders. The patterns on the Mafjar screens were not so drawn. In one dimension, it is true, they were laid out according to the size of the field; but along the second it was the formula which dictated the unit of the pattern and not the area; and since the formula ignored the actual proportions of the panels, the pattern seldom fitted.[5] In such cases the sculptor thought primarily of his pattern, ready to hand, and left its adaptation to the field to chance.

A tailor's cutter observes symmetry as far as possible, but is otherwise uninfluenced by the pattern on the cloth. So it was generally with the Mafjar sculptor. In such panels as 1, 3, 10, 11, and 14 (Figs. 10, 15, 21, 20, and 12) he applied his formula without compromise, starting from the centre or from one side and allowing the design to run off at the edges where it would. But occasionally the misfits caused him some discomfort and he preferred to modify the pattern and bring it to some sort of conclusion (Figs. 7 and 22, bottom edge).[6] It is perhaps not too fanciful to detect in this compromise the instinctive hesitancy of a craftsman essaying a lately adopted and still unfamiliar convention.

To conclude: the sculptors of the Mafjar screens were, we think, Syrians. The basic

[1] Figs. 31, 32. [2] Fig. 30. [3] Figs. 40–42.

[4] In the forecourt the sculptor stuck to one design; his arcades, marching out of the picture to right and left, belong to the 'infinite' category.

[5] A grid of equilateral triangles can only fit a field whose proportions are those of the height to the base of such a triangle, or any of their multiples. Similarly, a rectangle can be divided into squares only by finding a length which is an exact fraction of both its sides.

[6] Contrast the right-hand edge of the same panel.

elements of their craft, its spirit, and the main stock of its themes were traditional in the country. To this inherited tradition a new vitality had been injected by the ambitious building programmes of the Umayyad rulers and by mutual contact with foreign, and especially Mesopotamian, industry. The adaptation of an easily worked medium and of the infinite type of design encouraged swift output, variety, and experiment such as the lavish tastes and princely expenditure of the Umayyad court at once stimulated and demanded. Invention, enthusiasm, and skill were there, all the materials for an ornament of unusual richness. But as in the general architecture of the palace and adjoining buildings so in these screens, the command of design was still, we feel, at the level of detail; it awaited still the maturity that should fuse its diverse elements in the full harmony of an accomplished style.

R. W. Hamilton

INDEX OF SCREEN PANELS FROM CENTRAL COURT

Figure	*Panel No.*	*P.A.M. No.*	*Plate*
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„ 13	2	44.334	„ I
„ 17	2A	„	„ I
„ 15	3	44.335	„ II
„ 22	3A	„	„ III
„ 24	4	44.336	„ IV
„ 19	4A	„	„ IV
„ 25	5	44.337	„ IV
„ 5	5A	„	„ IV
„ 11	6	44.338	„ V
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„ 3	7A	„	„ V
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„ 18	9A	„	„ VI
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„ 26	12	44.344	„ VIII
„ 4	12A	„	„ VIII
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—	15 (2)	44.346	„ XVI
—	15 (2)A	„	„ XVI
„ 9	16	44.347	„ XVII
—	16A	„	„ XVII
—	One isolated fragment	44.360	„ XVII

Panel 1

Panel 1A

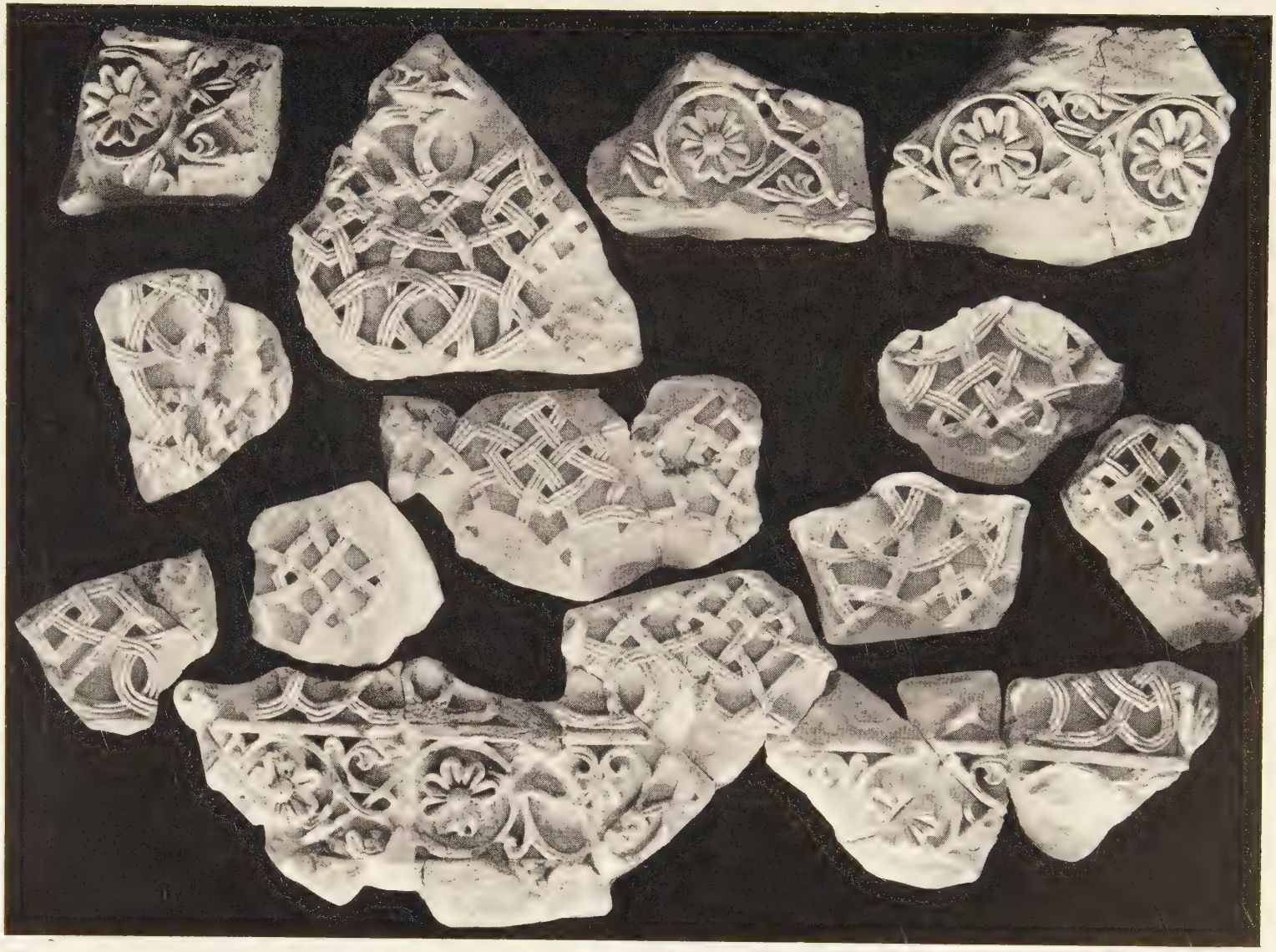
Panel 2A

Panel 2

PLASTER BALUSTRADES, KH. AL MAFJAR

Panel 3

PLASTER BALUSTRADES, KH. AL MAFJAR



Panel 3A

PLASTER BALUSTRADES, KH. AL MAFJAR

Panel 4 Panel 4A

Panel 5

Panel 5A

PLASTER BALUSTRADES, KH. AL MAFJAR

Panel 6

Panel 7

Panel 6A

Panel 7A

PLASTER BALUSTRADES, KH. AL MAFJAR

Panel 8

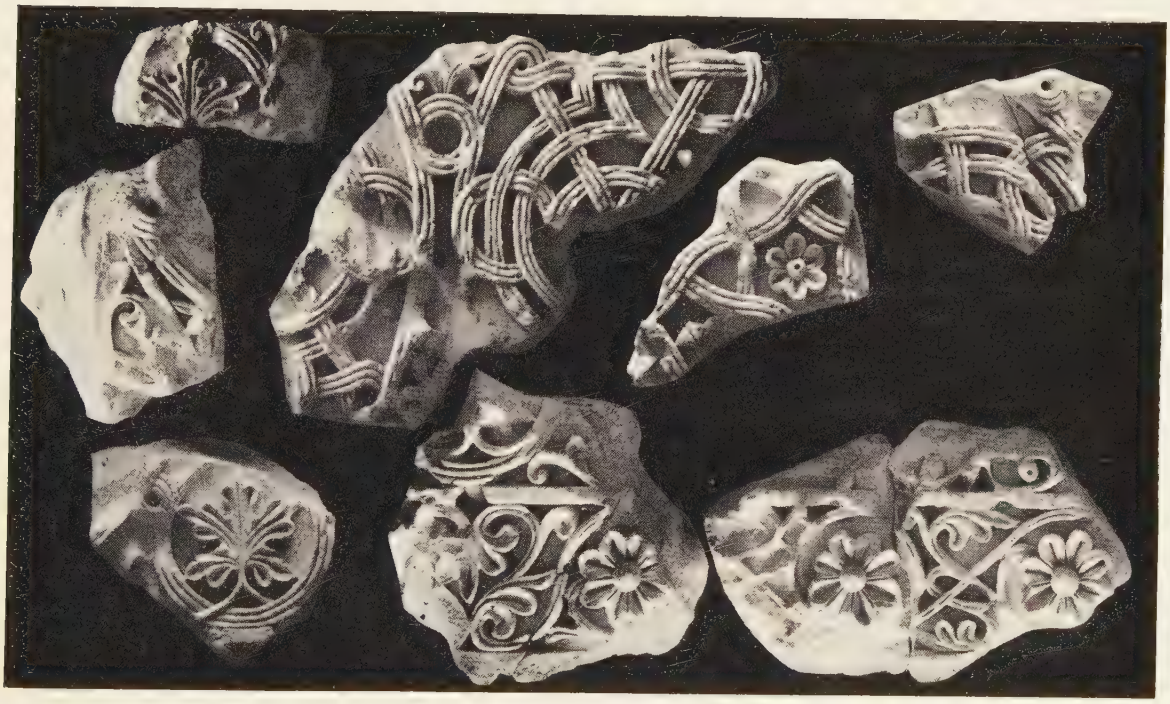
Panel 8A

Panel 9

Panel 9A

PLASTER BALUSTRADES, KH. AL MAFJAR

Panel 10



Panel 10A

PLASTER BALUSTRADES, KH. AL MAFJAR

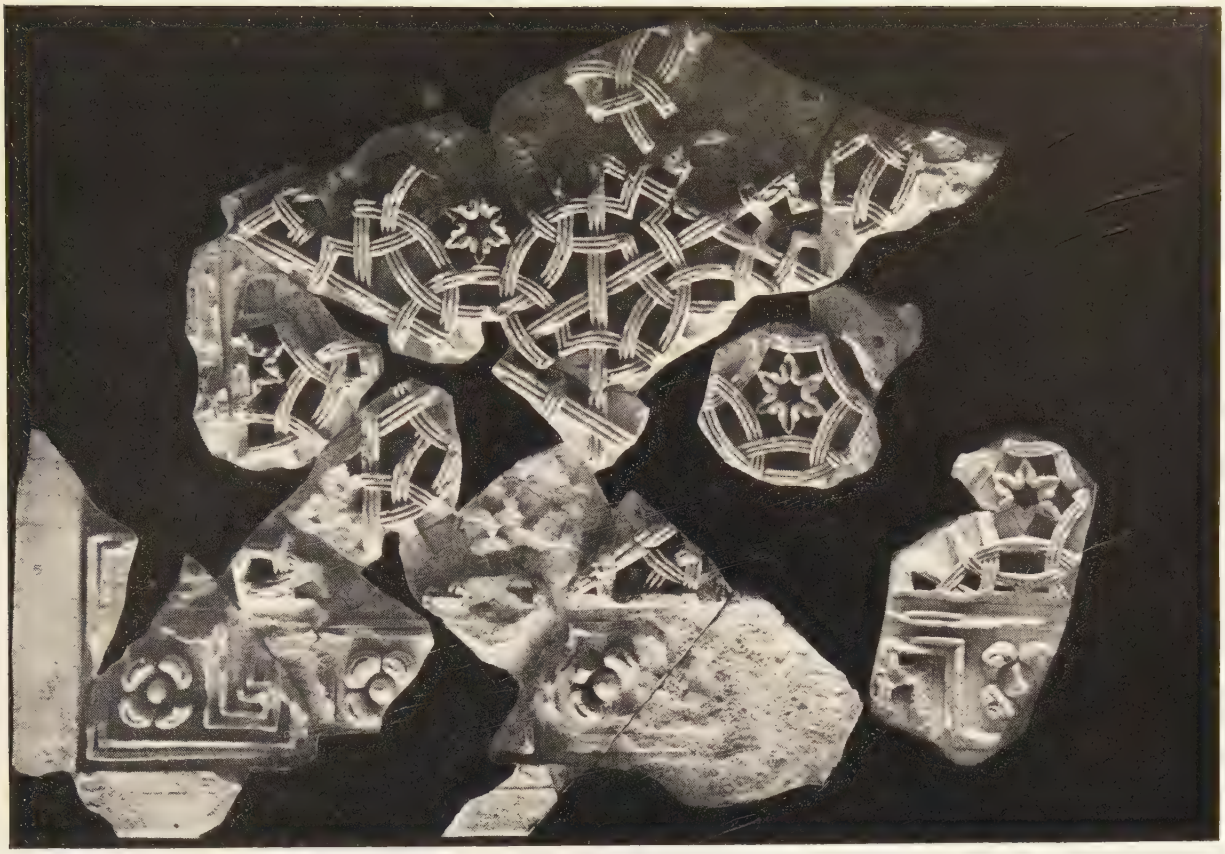
Panel 11

Panel 11A

Panel 12A

Panel 12

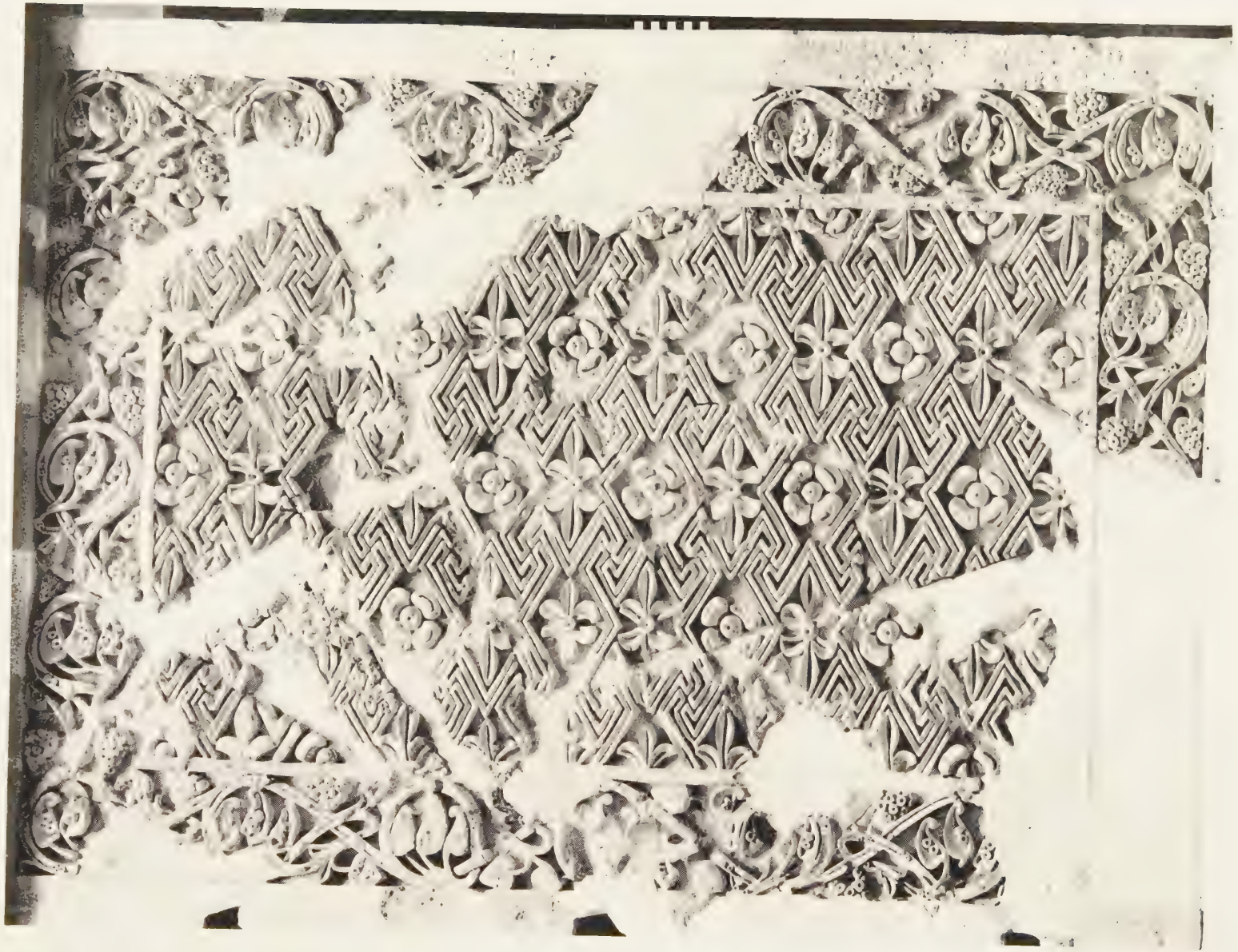
PLASTER BALUSTRADES, KH. AL MAFJAR



Panel 13

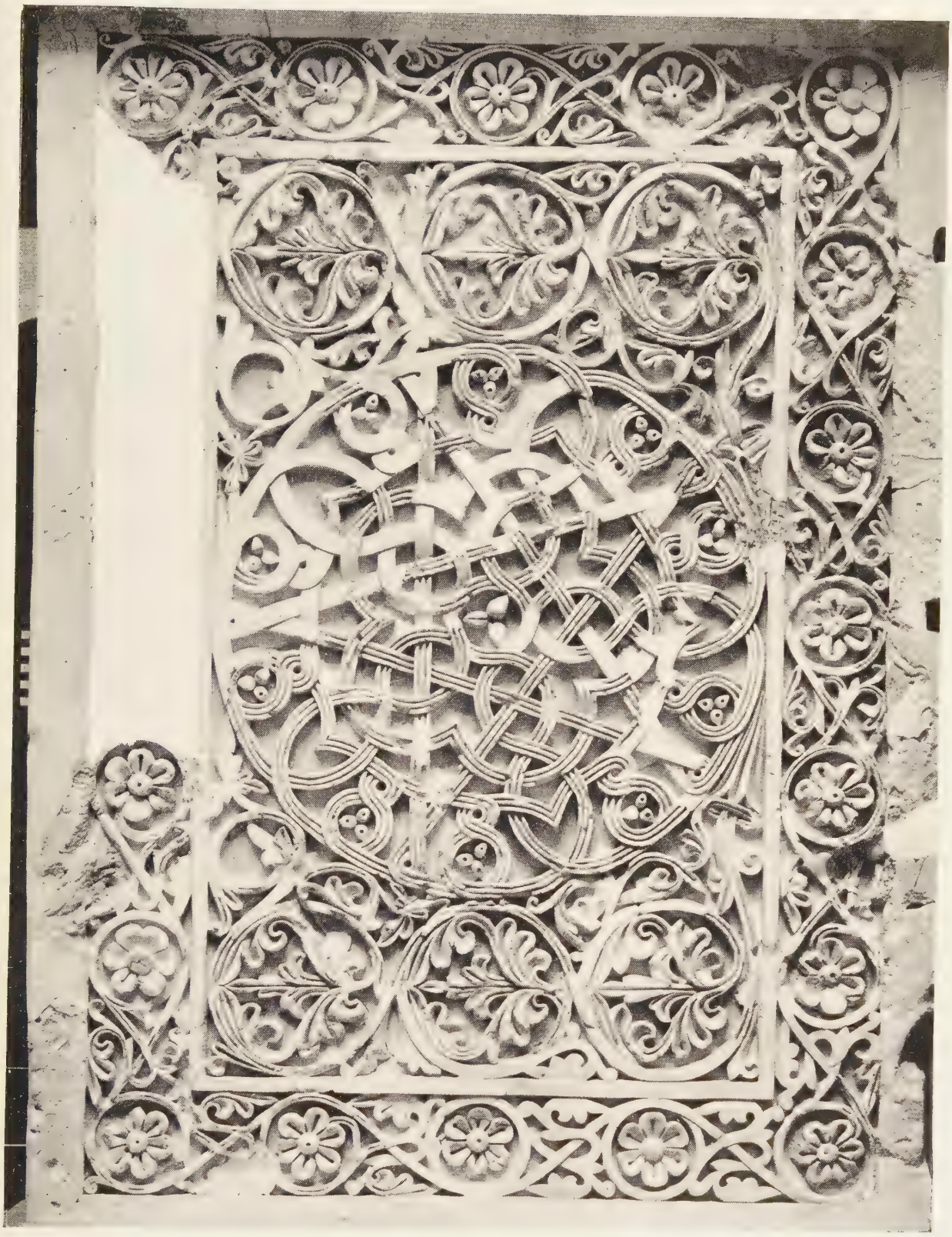
Panel 13A

PLASTER BALUSTRADES, KH. AL MAFJAR



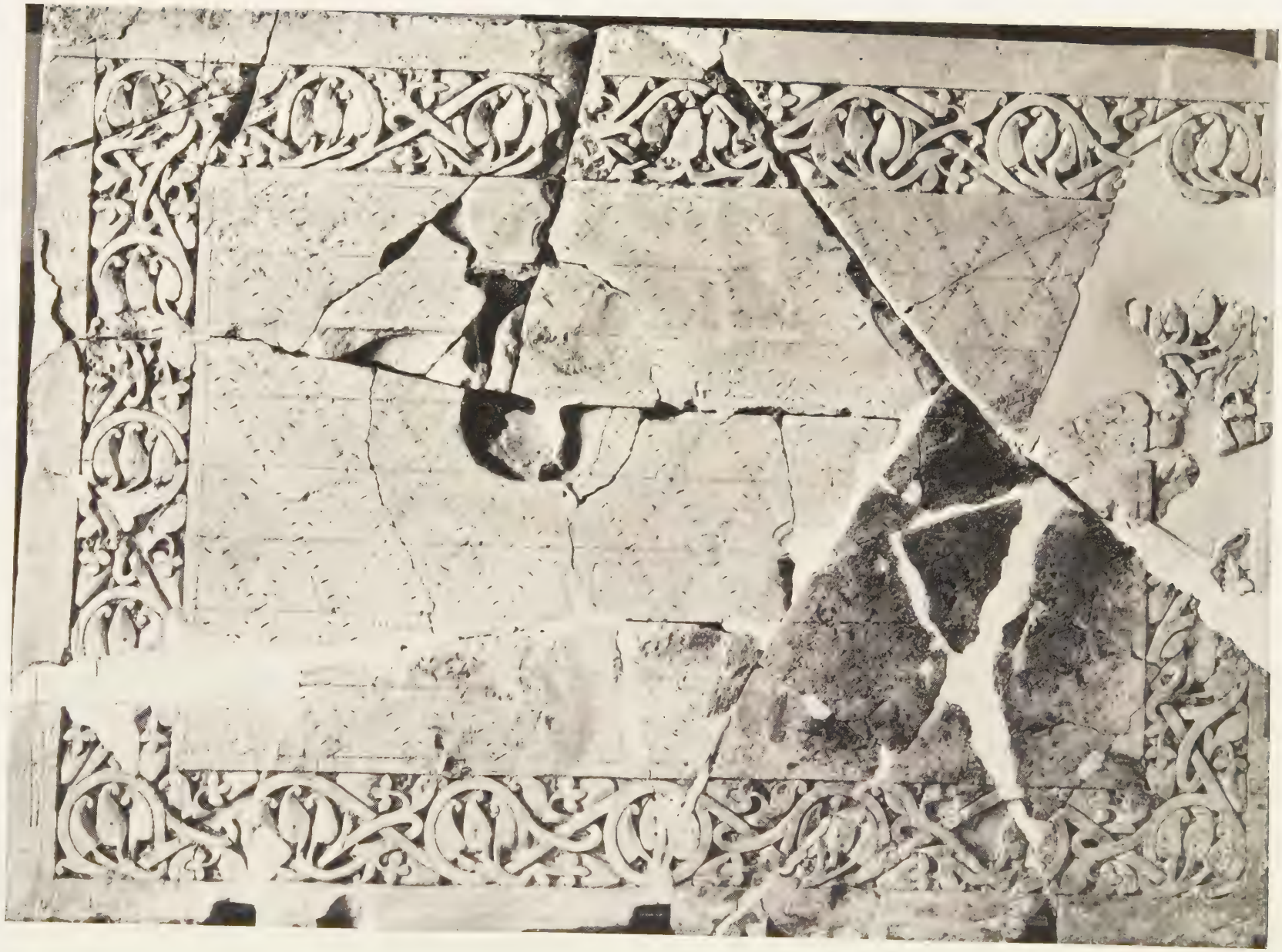
Panel 14

PLASTER BALUSTRADES, KH. AL MAFJAR



Panel 14A

PLASTER BALUSTRADES, KH. AL MAFJAR



Panel 14(2)

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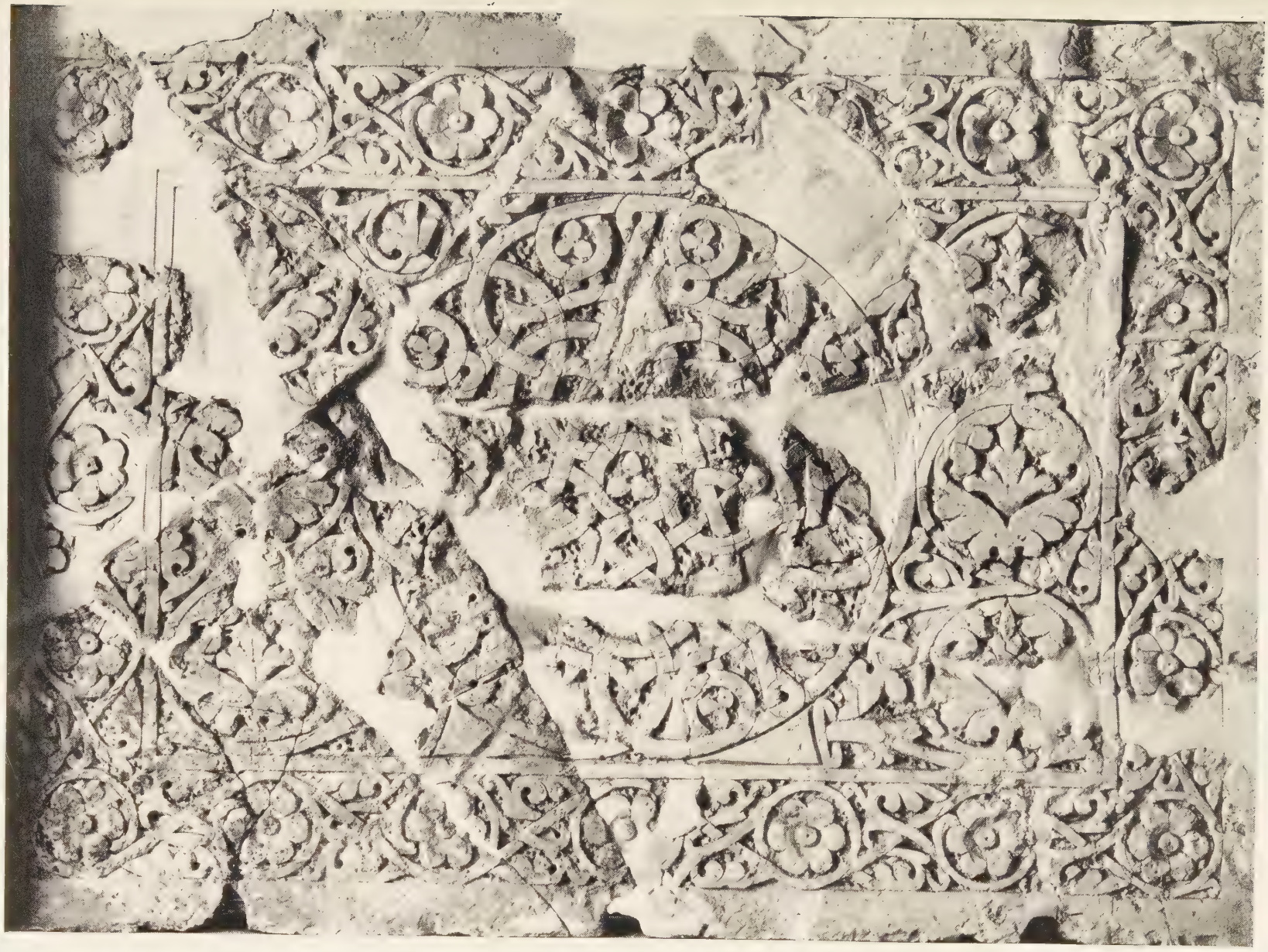

Panel 14A(2)

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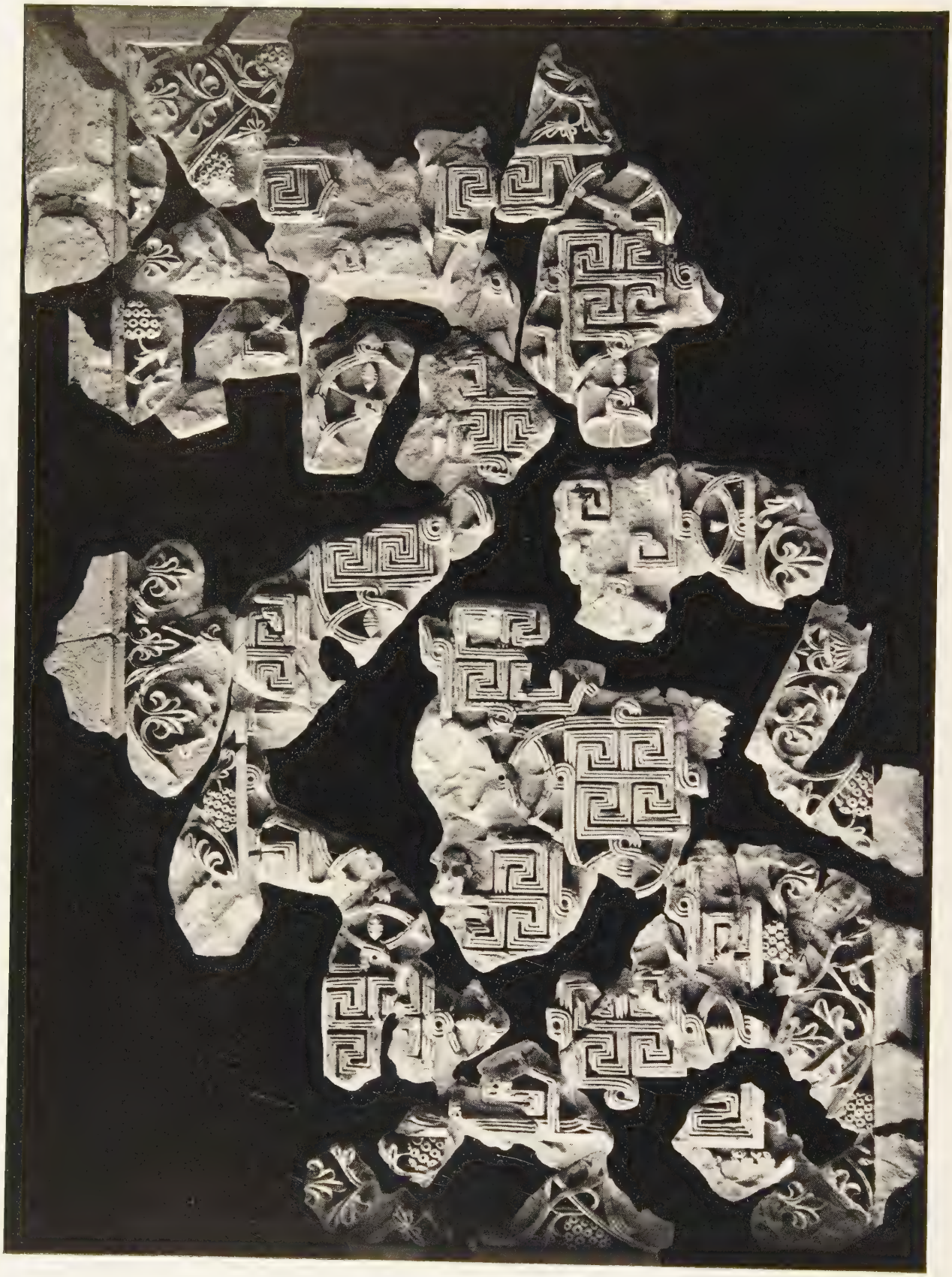


Panel 15

PLASTER BALUSTRADES, KH. AL MAFJAR

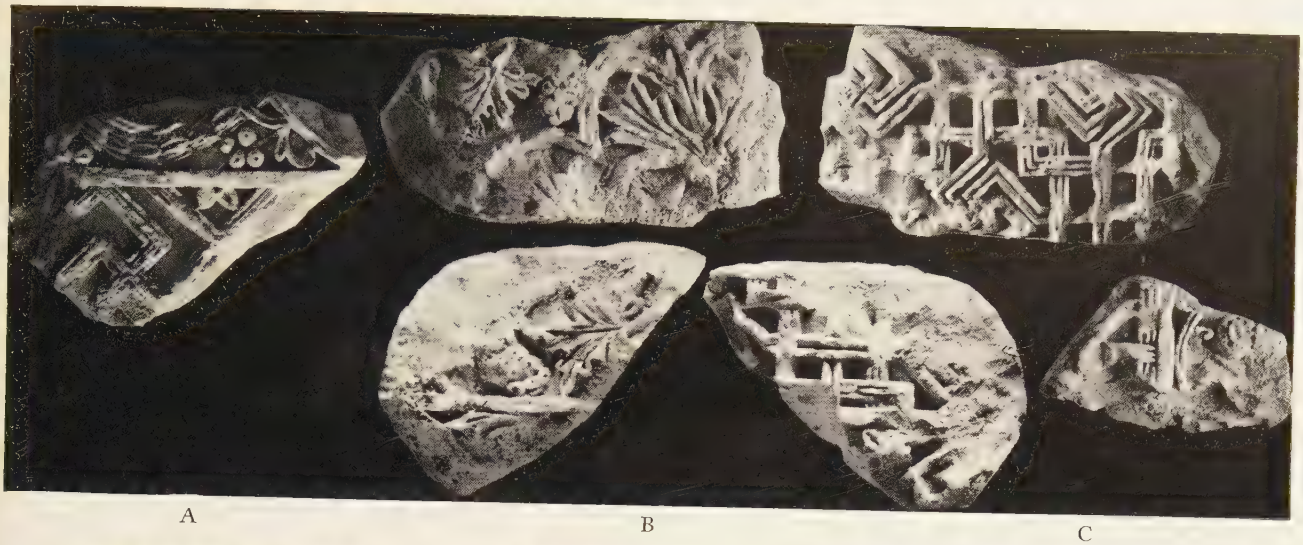
Panel 15A

PLASTER BALUSTRADES, KH. AL MAFJAR

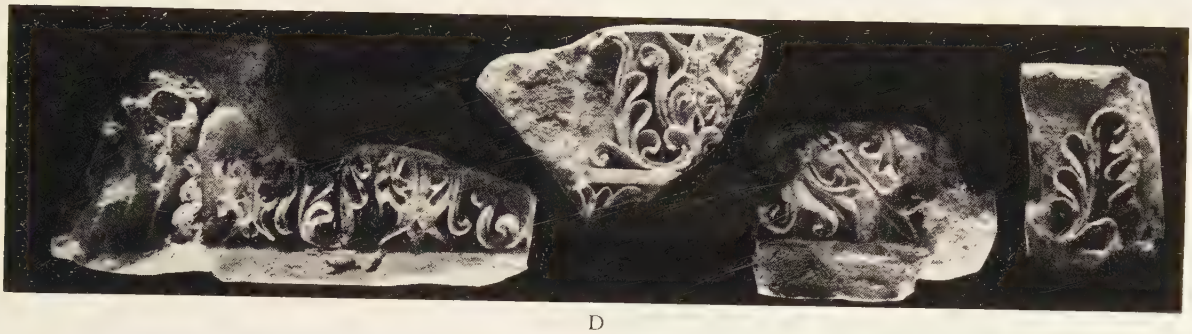
Panel 15(2)

Panel 15A(2)

PLASTER BALUSTRADES, KH. AL MAFJAR



A B C



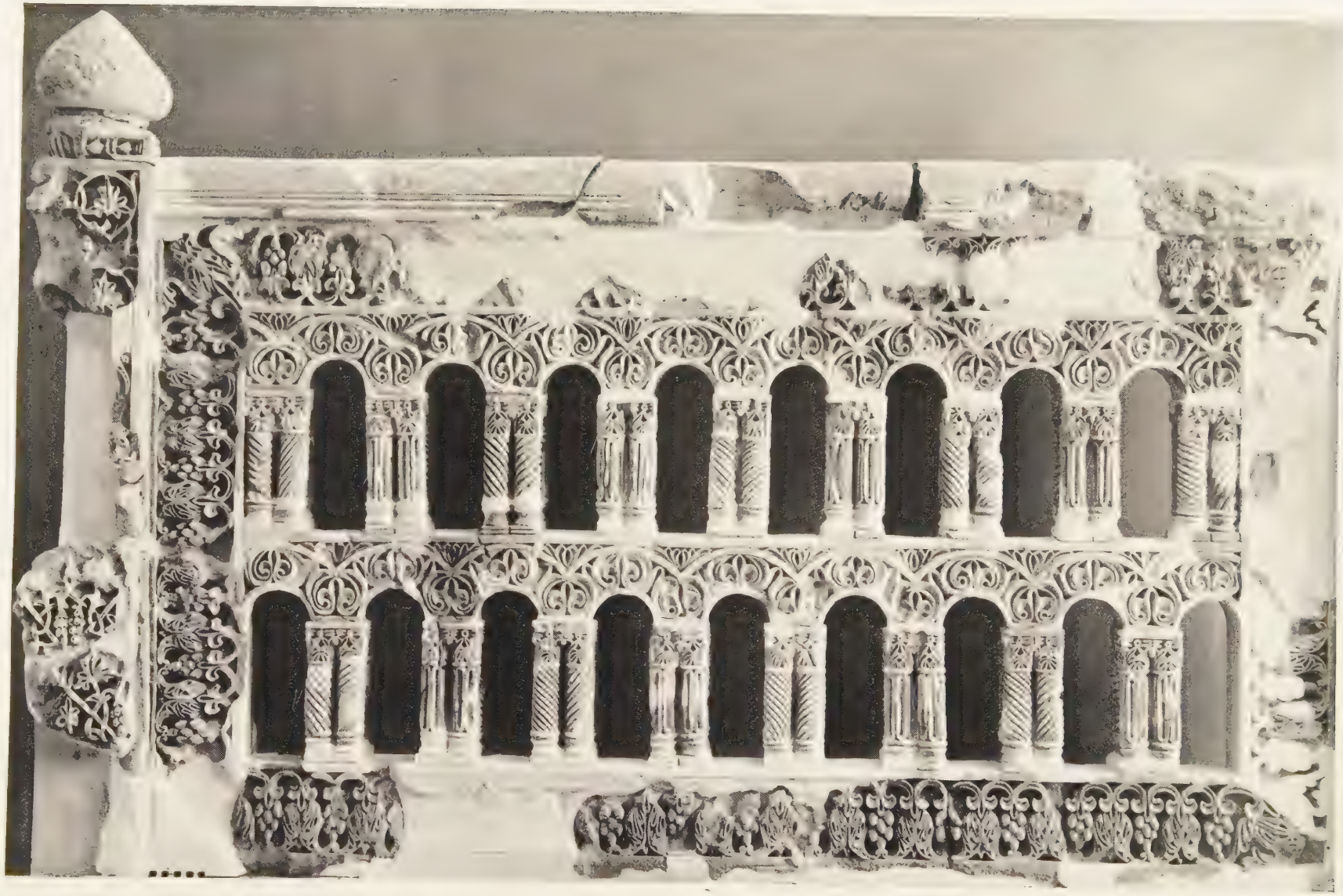
D

E

F G

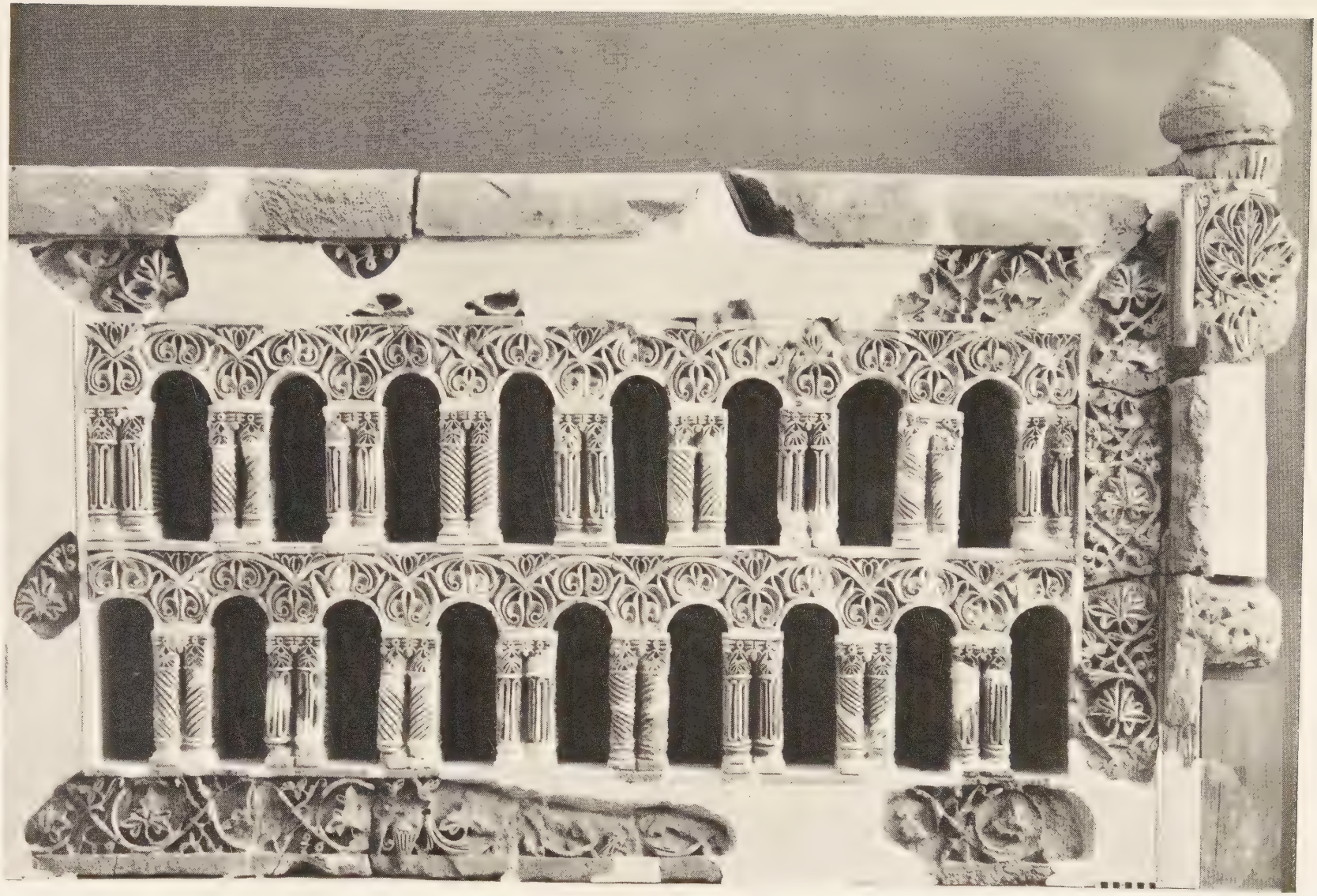
A. Isolated fragment; B–C. Panel 16A, 16; D–G. Various borders from Forecourt

PLASTER BALUSTRADES, KH. AL MAFJAR



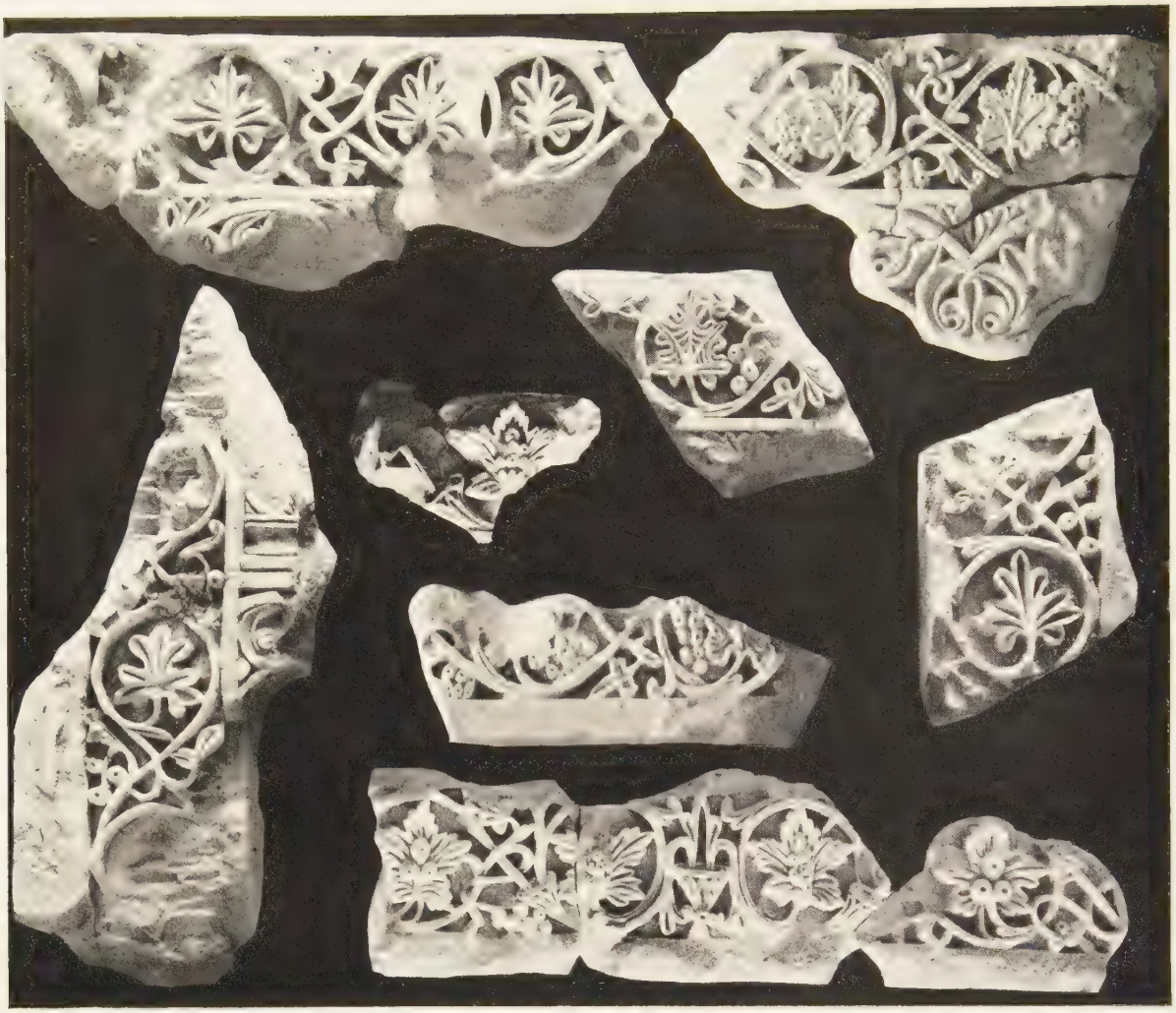
Restored panel from Forecourt

PLASTER BALUSTRADES, KH. AL MAFJAR



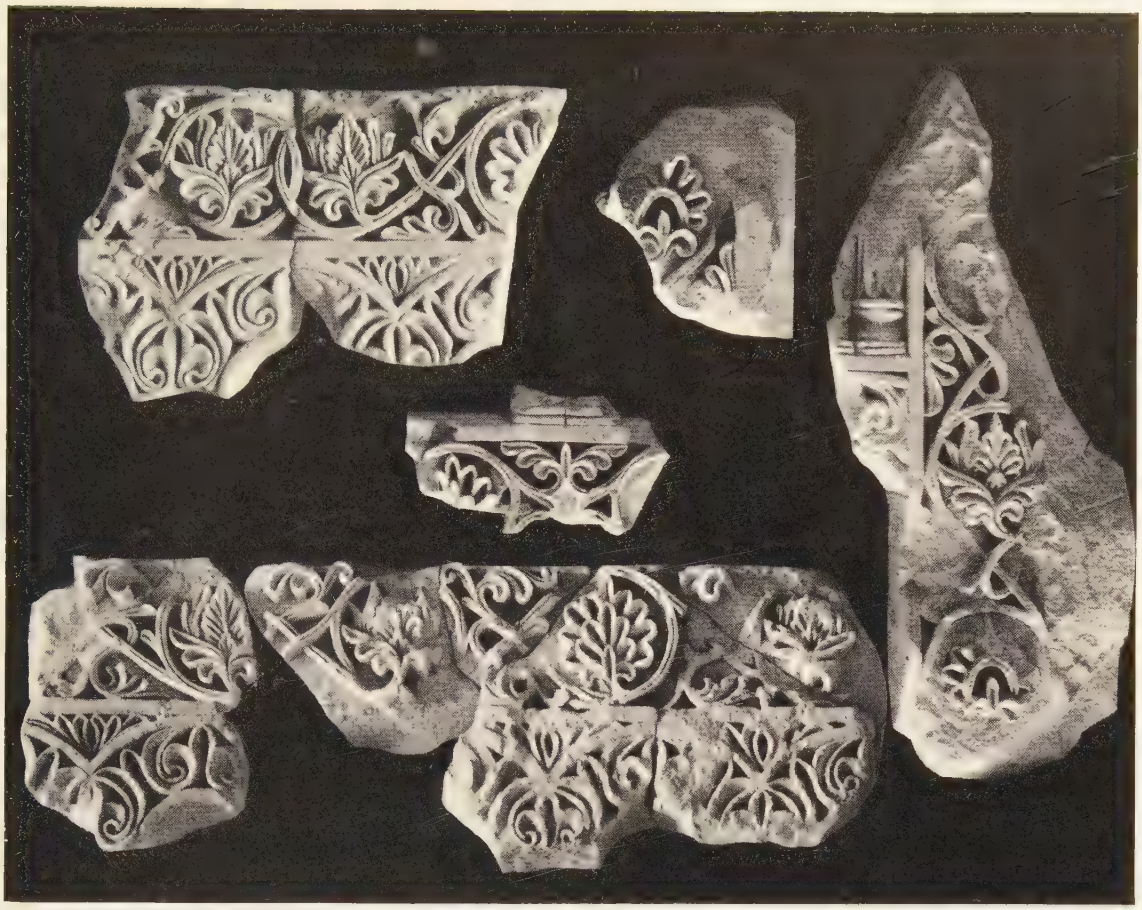
Restored panel from Forecourt (reverse)

PLASTER BALUSTRADES, KH. AL MAFJAR



Border fragments from the Forecourt: grapes and vine leaves

PLASTER BALUSTRADES, KH. AL MAFJAR



Border fragments from the Forecourt: Palmette flowers and acanthus whorls

PLASTER BALUSTRADES, KH. AL MAFJAR

Restored posts

PLASTER BALUSTRADES, KH. AL MAFJAR

Various details

PLASTER BALUSTRADES, KH. AL MAFJAR

COINS OF THE BYZANTINE–ARAB TRANSITION PERIOD

COINS OF THE BYZANTINE–ARAB TRANSITION PERIOD

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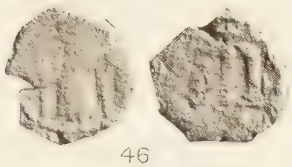
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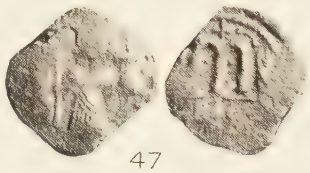
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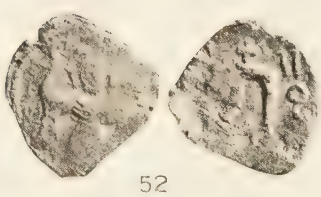
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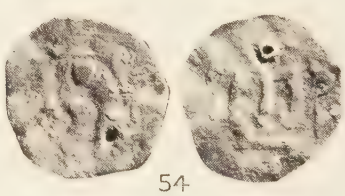
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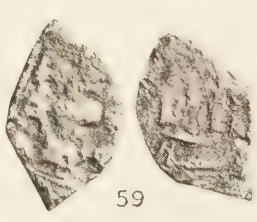
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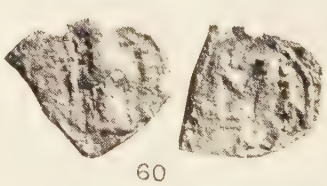
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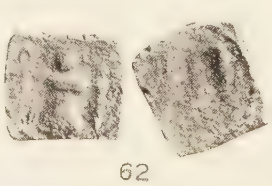
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COINS OF THE BYZANTINE–ARAB TRANSITION PERIOD

COINS OF THE BYZANTINE-ARAB TRANSITION PERIOD

SHORTLY after the conquest of Syria by the Arabs a series of bronze coins made their appearance, which at first appeared to consist of 'folles' issued by the Byzantine Emperors Heraclius and Constans II.

The obverses bore the imprint of figures clad in long robes, crowned, holding a long cross in the right hand and a globus with cross in the left hand. The reverses showed the M of the 'folles' in either cursive or square script.

The inscriptions were varied; some were in Greek alone, others in Arabic, but sometimes both these languages appeared together. The mints named on the coins included Dimishq, Ba'albek, Homs, Tabariya, and Falastin.

This series is known and is accepted by numismatists as having been struck in Syria by or for the Arabs (*vide* the *Catalogue of Oriental Coins in the British Museum*, by Stanley Lane-Poole, Vol. IX, 1889, pp. 1–17).

A number of bronze coins have been collected in Trans-Jordan which appear to be connected with the series referred to in the above paragraph, although they do not bear intelligible inscriptions. Some indeed show no lettering at all.

It seems evident that the dies for these coins were prepared by workmen without knowledge of Greek and, therefore, people who were not employees of a Byzantine mint. It is true that regular mints of this period were guilty of gross errors in spelling, but not to the extent of producing a coin without intelligible inscription. It is suggested that these coins were also struck in Syria for the Arab conquerors before a purely Arab and Moslem type had been evolved in the reign of Abd al Malik ibn Marwan. The existence of such issues is suggested in the footnotes to pages 267 and 270 of the *British Museum Catalogue of Byzantine Coins*, by W. Wroth.

The collection illustrated in Plates XXIV–XXVI consists of sixty-three examples and contains only two instances of duplicate coins, that is to say coins struck from the same dies. These are Nos. 8 and 9 and Nos. 20 and 21.

This fact indicates a surprising number of dies in a makeshift issue of this nature.[1]

A. S. KIRKBRIDE

CATALOGUE OF COINS

No.	*Size*[2]	*Obverse*	*Reverse*
		TYPE a	
1	0·85	Figure of Emperor, standing facing, holding in r. long cross, in l. globus cross; wears crown with cross and long robes. In field on r., palm branch surmounted by star, a crescent above globus.	M; above, a cross with a star on l., a crescent on r.; in field on l., $\frac{\epsilon}{V}$; on r., $\frac{A}{I}$; below, A.

[1] For a further discussion of this problem cf. R. Cottevieille-Giraudet, 'La collection Decourdemanche (Monnaies Musulmanes) au Cabinet de Medailles' in *Revue Numismatique*, 1934, pp. 199–219, who argues that the coins are Byzantine; and A. R. Bellinger, *Coins from Jerash, 1928–1934* (Numismatic Notes and Monographs, No. 81), 1938, pp. 14 ff. and especially 137–41, who finally settles the question and proves the coins to be Arabic.

[2] Size in inches.

No.	*Size*	*Obverse*	*Reverse*
		TYPE b	
2	0·85	Figure of Emperor as above. In field on r., O.	♏; above, a cross; in field on l., A И; on r., ⟨ O C.
3	0·75	Same type. In field on l., T; on r., star and eagle.	Same type as No. 2.
4	0·7	Same type. In field on r., O.	Same type. In field on l., ⟨ H.
5	0·65	Same type. (Worn.)	Same type. In field on l., O N; on r., ⟨ O C.
6	0·7	Same type. In field on l., T.	Same type. In loops of M, ⟨ ; in field on r., A N.
7	0·65	Same type. (Worn.)	♏; above, cross; on r., ⁴.
8	0·8	Same type. Fields, blank.	♏; above, cross; on l., A N; on r., ⟨ П; in ex., ϟPY.
9	0·8	(Duplicate of No. 8.)	(Duplicate of No. 8.)
10	0·65	Same type. Fields, blank.	♏; above, cross; on l., A ⊢ O A; on r., A N ‖ O; in ex., KHЯ.
11	0·65	Same type. In field on l., T and eagle.	♏; above, three crosses; on l., a star above a palm branch; in ex., OИ··.
		TYPE c	
12	0·75	Same type. In field on l., eagle; on r., a palm branch.	Same type as No. 2 but with stars instead of pellets in loops of M. No inscription.
		TYPE d	
13	0·75	Same type. In field on r., ш.	♏; above, cross; on l., ⟨ Λ; on r., Λ И O; in ex., ИO·.
14	0·75	Same type. Fields, blank.	♏; above, cross; on l., O N; on r., ⁝ Є.
15	0·65	Same type. Fields, blank.	Same type. In field on r., Є.
16	0·8	Same type. (Worn.)	♏; above, ψ; on l., H; on r., A V.
		TYPE e	
17	0·75	Same type. (Objects in field obscure.)	♏; above, cross; on l., A N O; on r., (?); in ex., ////كمالا (first Arabic letter is illegible).
18	0·7	Same type.	Same type. On l., ⁘. (Arabic appears to be the same as that of No. 17.)
		TYPE f	
19	0·8	Figure of Emperor crudely drawn with a long cross in both l. and r hands.	♏ (elongated M) above, cross; on l., > ‖; on r., ⊢ >.

No.	*Size*	*Obverse*	*Reverse*
		Type g	
20	0·7	Same type as No. 1. In field on r., Є.	M; above, cross; on l., ℧; on r., palm branch; in ex., seven dots. (No inscription.)
21	0·75	(Duplicate of No. 20.)	(Duplicate of No. 20.)
		Type h	
22	0·8	Same type. In field on l., I/Ɔ; on r., star.	M; above, cross; on l., (illegible); on r., Δ / Є / T; in ex., CAO.
23	0·95	Same type. (Worn.)	Same type. On l., Λ / O; on r., Λ / Є / O; in ex., OAƆ.
24	0·75	Figure of Emperor with long cross in l. hand and globus in r.	M; on l., A / N / O; on r., (illegible); in ex., CAO.
25	0·8	Same type as No. 1.	M; above, cross; on l., H; on r., И; in ex., CAT.
		Type i	
26	0·7	Same type.	M; above, cross; on l., O / Φ / Λ; on r., H / Є; in ex., (illegible).
27	0·75	Figure of Emperor with long cross in left, globus cr. in right. On l., Π.	M; on l., I/┐; on r., H / H / O.
28	0·8	Same type as No. 1. (Worn.)	M; above, cross; on l., A / И / A; on r., (illegible); below, ⌒.
29	0·81	Same type. (Crude work.)	M; on l., H/Ɔ; on r., N; in ex., (illegible).
30	0·75	Same type. In field on r., O.	M; above, NAN; on l., A / N; on r., Φ / Є; in ex., //IIA.
31	0·85	Same type. (Worn.)	M; above, cross; on l., A / N (rest illegible).
32	0·85	Same type. (Fragment of a larger coin.)	M; (rest illegible).
33	0·85	Same type. (Fragment of a larger coin.)	M; above, cross; on r., N / N.
34	0·8	Same type. (Worn.)	M; above, cross; (rest illegible).
35	0·75	Same type. (Worn.)	M; on r., O / ⋮; (rest illegible).
36	0·75	Same type. In field on l., Ɔ; on r., C.	M; on r., Ṅ; (rest illegible).
37	0·85	Figure of Emperor with elongated neck, long cross in l. hand, globus in r.; in field on l., И; on r., O.	M; on l., N; on r., Є; in ex., (illegible).

No.	*Size*	*Obverse*	*Reverse*
38	0·75	Same type as No. 1. (Fragment of a larger coin.)	⊞; above, cross; on l., A; on r., N.
39	0·85	Same type. In field on r., ϵ.	⊞; above, cross; on l., A/N; in ex., ⊐´.
40	0·75	Same type.	⊞; on l., O/Λ, (rest illegible).
41	0·75	Same type. (Crude design.)	⊞; above, star; on l., A/И/A; (rest illegible).
42	0·85	Same type. In field on r., O.	⊞; above, cross; on l., A/Ṇ; (rest illegible).
43	0·9	Same type.	⊞; on l., ꟼ/Λ; on r., Δ/И.
44	1·0	Same type. In field on r., crescent. (Fragment of a larger coin.)	⊞; (worn).
45	0·8	Same type.	⊞; above, cross; on l., II; (rest illegible).
46	0·7	Same type. (Worn.)	⊞; above, cross.
47	0·65	Same type. (Worn.)	⊞; above, cross; on r., A/Ṇ; (rest illegible).
		Type j	
48	0·65	Same type. (Crude design.)	⊞; above, cross; on l., Λ/I; on r., A/V.
49	0·65	Same type; globus in r. hand.	⊞; above, cross; on l., J/Γ/I; on r., ϵ.
50	0·65	Same type; globus in r. hand.	⊞; on r., ϵ; (rest illegible).
51	0·7	Same type as No. 1.	⊞; in ex., ~; (rest illegible).
52	0·8	Same type.	⊞; above, cross; on r., II/Ϙ; (rest illegible).
53	0·75	Same type; globus in r. hand surmounted by ψ instead of a cross.	⊞; above, \; in ex., Λ>; (rest illegible).
54	0·9	Same type as No. 1. (Thin flan.)	⊞; on l., Λ/ꟼ; on r., ꟼ/H.
		Type k	
55	0·8	Same type. In field on l., ∋. (Crude design.)	⊞; above, −OΛ; on l., Λ; on r., ⌒.
56	0·7	Same type. (Worn.)	⊞; above, <OↃ; on l., И; on r., ☾; in ex., ⌣⌣.
57	0·75	(Worn.) (Flan cut from a sheet of copper.)	⊞; above, O; on l., И/I; (rest illegible).
58	0·7	(Worn.) (Flan cut from a sheet of copper.)	⊞; above, V; on l., O; (rest illegible).

No.	*Size*	*Obverse*	*Reverse*
		Type l	
59	0·9	(Worn. Fragment of a larger coin.)	M; on r., O/N; in ex., سمسا.
		Type m	
60	0·75	Same type as No. 1.	M; on r., C/T/A; (rest illegible).
		Type n	
61	0·8	Same type.	M; above, cross.
62	0·65	Same type, loop instead of cross in r.	Same type.
63	0·7	Same type. (Fragment of a larger coin.)	Same type.

TWO HEBREW SEALS

1. *A Hebrew Signet-ring*

THE signet-ring described below[1] (Pl. XXVII, 1) is in the possession of Mr. J. M. Richman of Haifa,[2] who acquired it some years ago in Palestine. Its exact provenance is not known.

It consists of a seal set in a profiled gold mount fixed between the ends of a ring, equally of gold. Scarabs mounted in gold are quite frequent both in Egypt and Palestine, but mounted Hebrew–Phoenician seals are rare.[3] It seems, therefore, appropriate to dwell somewhat on the details of the material and the technique of the ring before describing the seal itself.

Each end of the ring which holds the casing has the form of a papyrus flower, the notches below indicating the tie-strings and the V-shaped incisions the petals. Rings with papyrus ornaments are extremely rare. The only parallel seems to be represented by an Egyptian faience ring of the period of the New Empire, in the Berlin Museum.[4] The ring itself is not round in section but is made of a hammered bar, square in section, bent into the form of a ring. The sharp edges of the bar would make the ring unsuitable for wearing on the finger. We may, therefore, assume that it was strung on a cord and usually worn on the neck; only in the act of sealing was the finger inserted into the ring to help exert the necessary pressure. The surface of the bar shows traces of polishing by hand. The other details of surface, decoration, &c., equally show signs of primitive workmanship. The mount is soldered to the ends of the ring, and tiny 'ghosts' or bits of solder are clearly discernible.

The material is gold, 23- to 24-carat. Gold purified to such a degree is rarely used nowadays, but is abundantly found in ancient times.[5]

The seal itself is a scaraboid with plain convex base, made of light green felspar or amazonite.[6] This mineral does not occur in Palestine, but is found in Egypt, where it was occasionally used for beads, amulets, and inlay from the Predynastic period onwards.[7]

The mount makes it impossible to ascertain whether the seal is pierced, but we may safely assume that it is not, since the perforation was only for threading a seal intended

[1] A note on this ring was published by the writer in Hebrew in the *Bull. of the Jewish Pal. Expl. Soc.*, Vol. XII (1946), pp. 43–5.

[2] My best thanks are due to Mr. Richman for his kindness in placing the seal at my disposal.

[3] A seal mounted in gilded silver was found at Carthage (cf. Diringer, *Iscrizioni*, p. 170, No. 9), another mounted in gold at Cadiz (*ibid.*, p. 249, No. 95), and the 'Jotham' signet-ring with copper casing at Ezion Geber (Glueck, *BASOR*, No. 79, p. 14, and Fig. 8).

[4] H. Schaefer and W. Andrae, *Die Kunst des alten Orients*, p. 387 (bottom r.). I owe this reference to the kindness of Mr. I. E. S. Edwards of the British Museum.

[5] C. R. Williams, *Gold and Silver Jewelry*, p. 25.

[6] Dr. Y. Bentor of the Geological Department of the Hebrew University kindly examined the material and gave me the benefit of his identification.

[7] Amazonite was imported from Egypt into Palestine as early as in the late Mesolithic period, cf. the group of beads found in level XI at Jericho (PAM, No. 35.2697; Joan Crowfoot in *AAA*, Vol. XXII, 1935, p. 180) and identified by Dr. Bentor as amazonite.

to be used without any mounting and there would have been no use for a hole in one set in a ring. It seems that the former custom was more in vogue, since ancient seals are usually pierced. Only a limited number of unpierced Hebrew seals is known, and since they comprise the famous seals of חמן, אסף and שמע עבד ירבעם, it is very probable that they were originally mounted in gold or silver.

The drawing on the seal shows, above, a series of parallel oblique lines joined by short horizontal strokes, and below the dividing line, a four-winged uraeus facing left (on the impression) and wearing the white crown of Upper Egypt. The form of the wings is somewhat reminiscent of those found on the scarab emblem of the *lemelek* handles. Winged uraei are not common on Hebrew seals, but occur in four instances.[1] Below the uraeus is a papyrus on a stalk. The device may represent the Egyptian serpent goddess Buto which is frequently shown above the *wꜣḏ* or papyrus plant. To the right of the uraeus and below it are clearly incised letters reading לשפט 'belonging to Shaphat'. The letters are not grouped together but scattered in the spaces not occupied by the design. This way of inscribing a seal, though not very common, is recorded on a few Hebrew seals, which contain scattered letters,[2] or the ל separated from the name.[3]

The name שפט is commonly found in the Bible, where it is applied to various persons and through various periods beginning from the time of the Exodus to the post-exilic period. As for seals, the name occurs on a seal from Lachish, in its full theophoric form, שפטיהו.[4]

The ל is peculiar in shape: the two lines meet at an angle as usual, but the longer one is bent at its lower end. When compared with the acute angle of the Gezer calendar (tenth century B.C.) or of the Samaria ivories (about the middle of the ninth century B.C.), on the one hand, and with the rounded ל of the Mesha stone (second half of the eighth century B.C.) or of the Siloam inscription (end of the eighth century B.C.), on the other, it appears that the ל with the broken long stroke, as on our seal, is a transition between the older lapidary form and the younger cursive letter.

The ש with its sharp angles is rather similar to the form found on tenth- and ninth-centuries inscriptions; in later periods the angles tend to become more rounded, as e.g. on the Siloam inscription.

As for the פ, it is noteworthy that the older form has a rounded angle and a more or less straight vertical stroke (cf. the Gezer calendar and the Abiba'al inscription), while in later periods the angle becomes acute and the stroke develops towards the left.[5] The פ of our seal shows an acute angle and a vertical stroke, thus again possibly forming a transitional form. This seems to be rare. The closest parallels are on the אסף seal of the eighth century and on the handles stamped למלך זיף.[6]

The ט is of special interest since it is extremely rare on seals. As a matter of fact,

[1] Torrey in *AASOR*, Vols. II–III (1923), Plate after p. 104: seal of *Elišama'*; Diringer, *op. cit.*, Pl. XX, 21; XXII, 2; and *PEQ*, April 1941, Pl. IV, 9.
[2] e.g. Diringer, *op. cit.*, Pls. XIX, 3; XXII, 2; XCI, 17.
[3] *Ibid.*, Pl. XIX, 9.
[4] Starkey, in *PEQ*, 1937, Pl. VIII, 2.
[5] Cf. the table and remarks of W. F. Albright in *BASOR*, No. 92, p. 20.
[6] Cf. also the weights inscribed נצף and פים; Diringer, *Iscrizioni*, Pl. XXIII.

I know only three seals with a ט, published hitherto: the Ammonite seal of אדוניפלט,[1] the above-mentioned seal of שפטיהו from Lachish, and the לפטאס seal recently published by the writer.[2] The ט on the Ammonite seal, which is the latest of the three (seventh century B.C.), is oval with a single horizontal stroke; while on the other two seals, which may be dated to the eighth century B.C., we find the archaic round form with two strokes crossing each other.

On palaeographic grounds I should be inclined to ascribe the seal to the end of the ninth or to the eighth century B.C.

2. *Two Stamped Jar-handles from Tell Judeida*

The two stamped jar-handles described below are in the Palestine Archaeological Museum, and although both are mentioned in the relevant literature, it may not be amiss to add a few details which seem to have escaped the notice of the students who dealt with them.

FIG. 1
(after Bliss)

(A) Part of a jar-handle (PAM, No. P 883) from the excavations of Bliss and Macalister at Tell Judeida in 1898–1900. The handle (Pl. XXVII, 2) is of hard, dark grey ware and wet smoothed. It bears the stamp made by a seal which has been applied unevenly to the handle and has therefore left but an incomplete and partly blurred impression. The stamp was first published by Bliss (Fig. 1), and according to the description 'it shows signs resembling a *mim* and a *shin* but the other symbols can represent no Hebrew letters'.[3] In their final publication Bliss and Macalister mention the reading שלם in a footnote,[4] but this seems to have been overlooked by later scholars, who based their discussions solely on the above-mentioned drawing and description. Thus Lidzbarski, in his report on new epigraphic discoveries, struck an even more cautious note in maintaining that 'nur ein מ ist deutlich zu erkennen'.[5] Finally, Diringer reaffirmed the presence of the two letters מ and ש and described the blurred part in the centre of the stamp as a *figura non precisabile*.[6]

Comparison with the following stamp, also found by Bliss and Macalister in their campaign in the Shephela,[7] removes all uncertainty from the reading.

(B) Fragment of a handle (PAM, No. P 3639) of hard, dark grey ware, with impressed stamp (Pl. XXVII, 3). The inscription consists of two lines: the upper one was correctly read as שלם (Šallum or Šillem) by the excavators; but the lower line, curiously enough,

[1] *AASOR*, Vols. II–III, pp. 104–5.
[2] *QDAP*, Vol. XII (1946), pp. 77–83, Pl. XXV *a*.
[3] *PEF Q St*, 1900, p. 220 and Pl. VII, 5.
[4] *Excavations in Palestine*, 1902, p. 119, note †.
[5] *Ephemeris*, Vol. I, 1902, p. 183, D–5.
[6] *Iscrizioni*, 1934, p. 144, No. 27.
[7] *Excavations in Palestine*, *loc. cit.* The provenance is not explicitly stated and Diringer adds a query mark after Tell Judeida. It is, however, certain that the handle was found there since the letters T J (for Tell Judeida) are written on it in blue pencil.

was entirely disregarded[1]—it reads אחא (*'Aḥa*). The first letter is very clear and shows the two upper hastae of the א, slightly nearing towards each other at the left without actually joining. The ח is in the form of a square with an ascending stroke at the right and a descending stroke at the left; the final א differs from the initial letter in having the two upper hastae coming to an angle at the left.

The name אחא is a hypocoristicon of the biblical theophoric name אחיה and appears in its abbreviated form in Talmudic Hebrew and in Palmyrene. It has not hitherto been found on seals or stamps, but occurs on the Samaria ostracon No. 51 as [י]אחא היהד (*'Aḥa* the Judaean).[2]

Each of the two names on the stamp is followed by a vertical line which obviously serves as a word divider. Word dividers are rare though existent on seals, and wherever they occur, either as dots or as small strokes, they are mostly used after the last word as well.[3]

That the two stamps are duplicates is implied by the excavators themselves. It can now be shown by exact measurements that both stamps are actually impressions of the same seal, reading שלם | אחא |. The *figura non precisabile* appears to have the ל of the first name as its head, while the final א and the dividing stroke of the second word serve as its legs.

The most interesting feature of these stamps is their outline, showing the form of a human foot. This form of *planta pedis*, which is so familiar on the *terra sigillata* stamps of the second century B.C. to A.D. first century, is rather unexpected on a Hebrew seal which as a rule is circular, oval, or rectangular. It would, however, be rash to postulate a connexion between these two forms so distant from each other both in place and in time, or even to assume a common and as yet unknown source.

A theory on the origin of the stamps *in planta pedis*, advanced as far back as 1841 by Fabroni,[4] surmises that the human foot must have occurred naturally to the potter as an emblem, since its outline, impressed in the heaps of plastic clay by the workers walking about in the courtyard, was constantly before his eyes. It may reasonably be assumed that the form was independently adopted at Tell Judeida in the Israelite period and at Arretium in Roman times.

It may further be inferred from Isaiah xlix. 16, 'I have graven thee upon the palms of my hands', and from Job xiii. 27, 'thou drawest thee a line about the soles of my feet', or according to the interpretation of Torczyner,[5] 'thou gravest thy name upon the soles of my feet', that the idea of writing a name on the palm or on the *planta pedis* was not unfamiliar in biblical times.

I. Ben-Dor.

[1] It is obvious that Diringer did not see the original when studying the seals in Jerusalem in 1930.

[2] Reisner, Fisher, Lyon, *Harvard Excavations at Samaria*, 1924, Vol. I, p. 237.

[3] Diringer, *Iscrizioni*, pp. 197, 205, 232. Cf. also the Samaria ostraca where the dividing dot is used after each word, including the last.

[4] *Apud* H. Dragendorff, 'Terra Sigillata', in *Bonner Jahrbücher*, 1895, p. 46.

[5] *The Book of Job* (in Hebrew), Jerusalem, 1941, Vol. I, p. 178 and Vol. II, p. 583. I have to thank Prof. Torczyner for this suggestion.

GREEK CHRISTIAN INSCRIPTIONS FROM RIḤĀB

THE ruins of Riḥāb in Trans-Jordan[1] were discovered and described by G. Schumacher in 1900.[2] Schumacher noted the existence of foundations of bossed masonry extending over an area of 800 m. south to north by 300–400 m. east to west. He dated the existing remains to the Byzantine–Arab period, on Roman foundations. His smaller finds include three Christian inscriptions in Greek[3] and a lintel decorated with crosses.[4] At the time of Schumacher's visit Riḥāb had been uninhabited for several centuries. The site was revisited in 1931 by W. F. Albright[5] and in 1932 by A. Alt.[6] The latter noted the beginning of resettlement on the spot. During the construction of the new houses there were uncovered a well-preserved mosaic pavement and the foundations of a Byzantine village church of a basilical type (21 m. by 14·30 m.). Alt was also shown two more tombstone fragments both inscribed in Greek.

Further discoveries of churches paved with mosaics were made subsequently. They were recorded by the Department of Antiquities of Trans-Jordan. The publication of the following six Greek inscriptions is due to the courtesy of Mr. Lankester Harding, Chief Curator of Antiquities, Trans-Jordan; Prof. M. Schwabe has kindly read the manuscript and has suggested several corrections.

1. *House of Khalid el Kifeisi.* Two inscriptions placed parallel across nave of church. Pl. XXVIII, 1.

Nearer to apse. Three lines in tabula with semicircular ansae at both ends. White letters on black background.

Revived square alphabet:[7] ЄCω. Abbreviation marks: Nomina sacra: l. 1 $\overline{\text{ΚΕ}}$, l. 3 $\overline{\text{ΧΜΓ}}$; others, ll. 2–3 ς = καὶ. Reduplication of last letter and mark of suspension to indicate plural l. 2 ΕΥΛΑΒSΒS, l. 3 ΠΑΡΑΜ̊Μ̊. Ligature ϐ in l. 3 but not in l. 2. Small ' in last καὶ of l. 1.

+Κ(ύρι)ε πρόσδεξ⟨αι⟩ τὴν προσφορὰν τῶν καρποφορησάντων καὶ τῶν καρπο / φορούντων καὶ ἐλέησον Κυριακὸν (καὶ) Ἰωάννην (καὶ) Κοσμᾶν εὐλαβ(εστάτους) / μοναχ(οὺ)ς (καὶ) παραμο(ναρίους) τ(οῦ)δε τ(οῦ) ἁγί(ου) τόπ(ου). Ἀμήν. Κύριε [Χ]$\overline{\text{ΜΓ}}$ (= Χριστὲ ὁ ἐκ Μαρίας γεννηθείς).[8]

'Lord accept the offering of present and past donors and have mercy on Cyriacus and John and Cosmas the most reverent monks and sacristans of this holy place. Amen. Lord Christ born of Mary.'

[1] Sq. 253–193, 1 : 250,000 map, Department of Lands and Surveys, Trans-Jordan, 'Amman sheet.

[2] *MuNDPV*, 1900, pp. 73 ff. See also G. Schumacher and C. Steuernagel, *Der 'Adschlūn* (in *ZDPV*, 1925, pp. 354 ff.); *Karte des Ostjordanlandes*, Sheet B5.

[3] Published by Chr. Rohrer, *MuNDPV*, 1901, p. 19, Nos. 8–10.

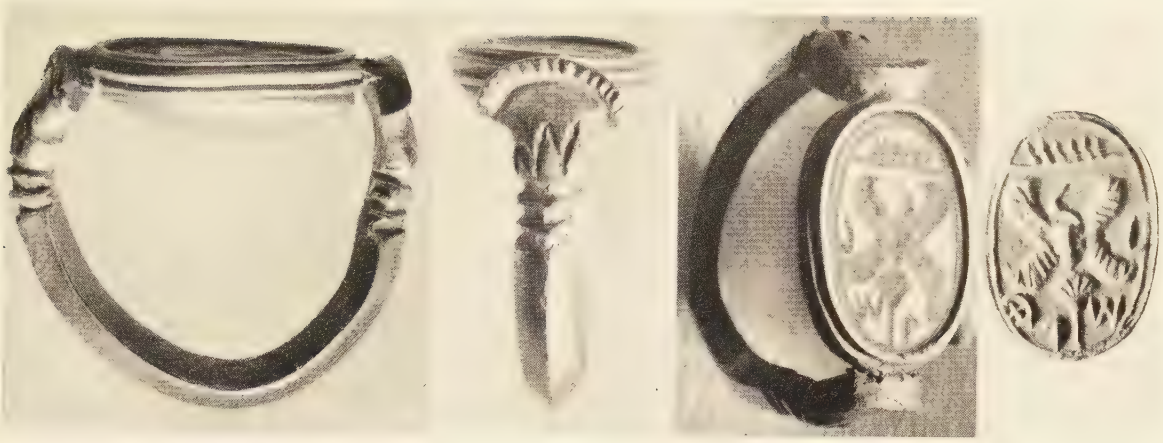
[4] *Der 'Adschlūn*, p. 356.

[5] *BASOR*, No. 49, p. 29.

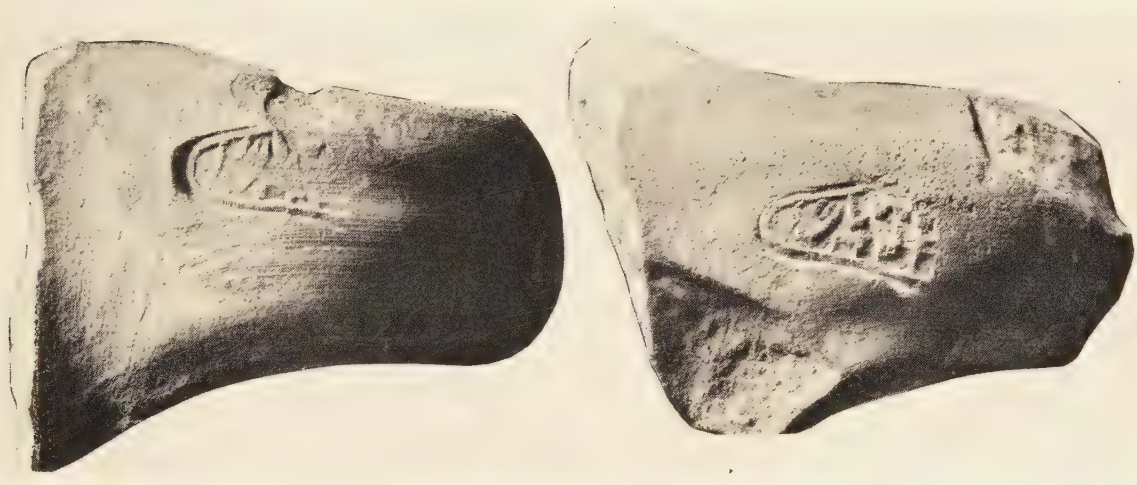
[6] *PJb.*, 1933, p. 24 f.

[7] Welles in *Gerasa*, ed. Kraeling, p. 364.

[8] See L. Jalabert et R. Mouterde, *Inscriptions grecques et latines de la Syrie*, Paris, 1939, Vol. II, No. 271, pp. 152–4 for the latest summing up of the discussion on this abbreviation; cf. also the remarks of P. Abel in *RB*, 1946, p. 145 and *QDAP*, Vol. IX, Supplem., p. 111. The Κύριε in front excludes the *a priori* assumption that ΧΜΓ stands here for Χριστός Μιχαήλ Γαβριήλ without affecting, however, the general rule as stated by Jalabert and Mouterde.



1. A Hebrew signet ring (2 : 1)



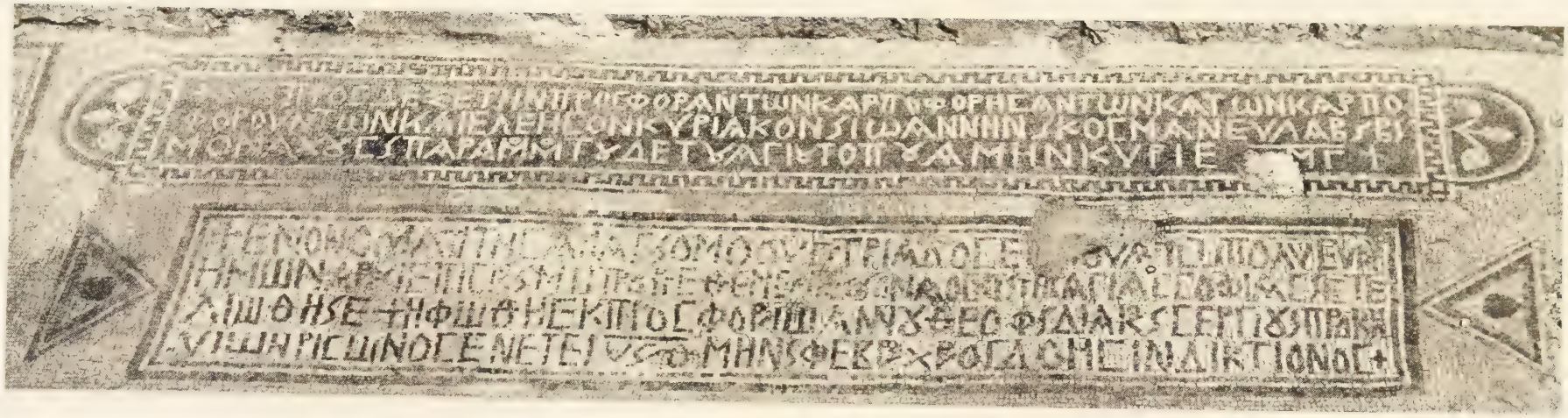
2 3

Two stamped handles (1 : 1)

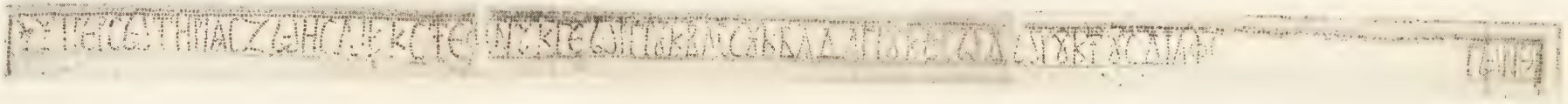
TWO HEBREW SEALS

4. Riḥāb. House of Hilal el ʿAli. View of apse of church

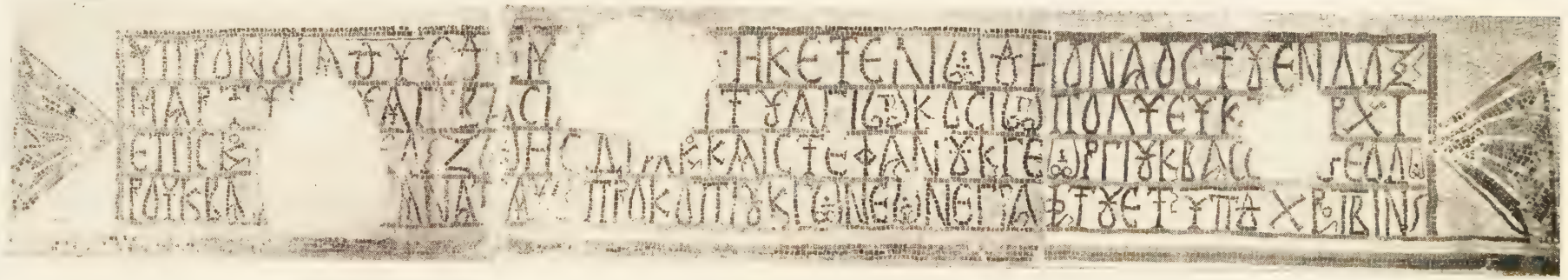
INSCRIPTIONS FROM RIḤĀB



1. Inscriptions 1–2, House of Khalid el Kifeisi



2. Inscription 3. House of Hilal el 'Ali



3. Inscription 4, ibid.

INSCRIPTIONS FROM RIḤĀB

2. West of No. 1. Four lines in tabula ansata. Black letters on white background.

Revived square alphabet: ЄϹѠ. L. 2 $\underline{\overset{\chi}{\text{Χ}}}$ for χ; l. 3 + for ψ. Ligatures: ΤΙ ΓΙ ΤΡ ΝΝ. ȣ as a rule but not always. In order to save space at end of ll. 1 and 3 ȣ lifted over reduced letter preceding it. ѕ both for καὶ and to mark suspension. Other suspension marks: short diagonal stroke joined to ⲣ and lifting of last letter $\overset{\tau}{\omega}$ $\overset{\circ}{\pi}$. ѕ or stroke combined with lifted letters twice: $\overset{\circ}{\kappa}$ѕ and ⲣ^{ȣ}. Horizontal stroke over numerals. Irrational abbreviation (ѕ for single letter): ἐθεμελιώθ(η).

+Ἐν ὀνόματι τῆς ἁγίας (καὶ) ὁμοουσ(ίου) Τριάδος ἐπ[ὶ] τ̣ο̣ῦ ἁγιωτ(άτου) Πολυεύκτου / ἡμῶν ἀρχιεπισκό(που) (καὶ) μητροπο(λίτου) ἐθεμελιώθ(η) ὁ ναὸς οὗτ(ος) τῆς ἁγίας Σοφίας (καὶ) ἐτε / λιώθη (καὶ) ἐψηφώθη ἐκ προσφορ(ᾶς) Ἰωάννου θεοφ(ιλεστάτου) διακό(νου) Σεργί(ου) (καὶ) Πρόκλου / υἱῶν Ρισῶνος ἐν ἔτει $\overline{\text{υϙθ}}$ μην(ὸς) Φεβρου(αρίου) χρ(όνοις) ὀγδόης ἰνδικτι⟨ῶ⟩νος+.

'In the name of the holy and consubstantial Trinity, in the time of the most holy Polyeuctus our archbishop and metropolitan was laid the foundation of this church of the Holy Wisdom and it was completed and paved with mosaics by the offering of John the most God-beloved deacon, Sergius and Proclus the sons of Rison in the year 499 in the month of February, in the time of the eighth indiction' (= February 604).

3. *House of Hilal el 'Ali.* Basilical church with interior apse, prothesis, and diakonikon. In apsis altar base with reliquary casket. Inscription in front of altar (Pl. XXVII, 4). One line.

Elongated oval alphabet[1] ЄϹѠ. Suspension marks ѕ and ⲕ or ϰ. Ligature ȣ. Break near end. Pl. XXVIII, 2.

+Ὑπὲρ σωτηρίας Ζωῆς δι(α)κ(ονίσσης) κ(αὶ) Στεφάνου κ(αὶ) Γεωργίου κ(αὶ) Βάσσου κ(αὶ) Βαδαγίου κ(αὶ) Θε⟨ο⟩δ⟨ώ⟩ρου κ(αὶ) τοὺς διαφέ[ροντας κ(αὶ) ὑπὲρ ἀναπαύσ(εως) τῶν] γ⟨ο⟩νέ(ων).

'For the salvation of Zoe the deaconess and Stephen and George and Bassus and Badagius and Theodore and their families [and for the repose of their] parents.'[2]

4. In the same church. West end of nave, in front of altar, below step and chancel screen. Four lines in tabula ansata. Black letters on white, separated by red lines.

Ornate elongated oval script. Suspensions marked by ѕ, separated or joined to last letter; doubling of marks by lifting and adding ѕ. Ligature ȣ. Line over date numerals. Breaks near beginnings of ll. 2–4, in middle of ll. 1–3, near end of 2–3. Pl. XXVIII, 3.

(Palm) Προνοίᾳ θ(εο)ῦ ἐθεμ[ελιώ]θ̣η κ(αὶ) ἐτελιώθη ὁ ναὸς τοῦ ἐνδοξ(ότατου) / μάρτυρ[(ος) το]ῦ ἁγ(ίου) Βασιλ̣[ίου ἐπ]ὶ τοῦ ἁγιωτ(άτου) κ(αὶ) ὁσιωτ(άτου) Πολυεύκτ̣[ου ἀ]ρχι / επισκό(που) [ἐξ ἐπιμ]ελ(είας)[3] Ζωῆς δια̣κο(νίσσης) καὶ Στεφάνου κ(αὶ) Γεωργίου κ(αὶ) Βάσσ[ου κ(αὶ)] Θεοδώ / ρου κ(αὶ) Βαδ̣[αγίου ὑπὲρ] ἀναπαύσ(εως) Προκοπίου κ(αὶ) γ⟨ο⟩νέων. Ἐγράφ(η) τοῦ ἔτ(ους) $\overline{\text{υπθ}}$ χρό(νοις) ιβ' ἰν(δικτιῶνος).

'By the providence of God was laid the foundation and was completed the church of

[1] Welles in *Gerasa*, ed. Kraeling, p. 363.

[2] There are about fifteen letters missing in this line, therefore the ΔΙΑΦЄ cannot relate to ΓѠΝΕЄ. The proposed formula fills the gap, but is, of course, purely conjectural.

[3] Cf. Waddington, *Inscr.*, Nos. 2037, 2241, 2457 *a*, 2477.

the most glorious martyr, Saint Basilius in the time of the most holy and most religious Polyeuctus, archbishop, from the offering of Zoe the deaconess and Stephen and George and Bassus and Theodore and Badagius for the repose of Procopius and his parents. Written in the year 489 in the time of the twelfth indiction' (= March–August 594).[1]

5. *House of Saad en Nuheh.* Manuscript copy only available. Five lines.

+ЄΝΟΝΟΜΑΤΙΤSΑΓΙΑCSΟΜΟȣCSΤΡΙΑΔΟC [....] ȣΑΓΙ$\overset{\text{Τ}}{\text{Ω}}$ΠΟΛΥЄΥΚS
ΑΡΧΙЄΠΙCΚΟΠȣЄΘЄΜЄΛΙΩΘSΟΝΑΟCȣΤΟCΤȣΑΓΙȣCΤЄΦΑΝȣS
ЄΨΗΦΩΘSSЄΤЄΛΙΩΘSЄΚΠΡΟCΦΟΡCЄΡΓΙȣΠΡЄS
CΤΡΥΙΩΝΓЄΩΡΓΙȣЄΝΤΩΠΑΤΡΙΚΙΩΑΥΤΩΝΤΟΠΩ
ΙΩΑΝΝȣΚΑΡΚȣCȣΠΑΡΑ$\overset{\text{Ο}}{\text{Μ}}$ΕΝ$\overset{\text{Η}}{\text{Μ}}$ΜΑΙΩΧΡΗ̄ΙΝΔSΤȣЄΤSΦῙϚ̄

+Ἐν ὀνόματι τ(ῆς) ἁγίας (καὶ) ὁμοουσ(ίου) Τριάλος [ἐπὶ τ]οῦ ἁγιωτ(άτου) Πολυεύκ(του) / ἀρχιεπισκόπου ἐθεμελιώθ(η) ὁ ναὸς οὗτος τοῦ ἁγίου Στεφάνου (καὶ) / ἐψηφώθ(η) (καὶ) ἐτελιώθ(η) ἐκ προσφορ(ᾶς) Σεργίου πρε(σβυτέρου) (καὶ) / Στρ(άτωνος?) υἱῶν Γεωργίου ἐν τῷ πατρικῷ αὐτῶν τόπῳ / Ἰωάννου Καρκουσου παραμο(ναρίου) ἐν μη(νὶ) Μαίω χρ(όνοις) η̄ ἰνλ(ικτιῶνος) τοῦ ἔτ(ους) ΦΙϚ̣.

'In the name of the holy and consubstantial Trinity, in the time of the most holy Polyeuctus archbishop, was laid the foundation of this church of Saint Stephen and it was paved with mosaics and completed from the donation of Sergius the priest and Straton (?) the sons of George, in their home town, while John (son of) Karkusos was sacristan, in the month of May, in the time of the eighth indiction, in the year 515' (= May 620).

6. *House of Hamad et Tallaq.* From manuscript copy with note by Mr. Harding: 'The gap represents a wall, but whether built on or through the mosaic I cannot say.'

+ЄΠΙΤΟΥΑΓΙΩΘЄΟΔΩΡȣΗΜΩΝΜΗΤΡ $\overset{\text{75 cms.}}{\text{.....}}$ ЄΨΗΦȣΤΟC
ΟΝΑΟCΤΟΥΑΓΙȣΠΡΟΦΗΤΟΥΗCΑΪΟΥЄΚΚΑ ..... ΥΔΗC
CΑΜΜΑCΑΙΟΥΘЄΟΦΠΡSΓЄΩΡΓΙȣΑΥΤ ..... ΙΙΩΑΝΝΟΥ
ΜΑΚΑΡΥΠЄΡΜΝЄΙΑCSΑΝΑΠΑΥCЄΟCΤΩ ..... ΩΝЄΝΜΗΝΙ
ΔΥCΤΡΩΧΡΟΓΔΟΗCΙΝΔΤΟΥ ..... CЄΠΑΡΧΙΑC

+Ἐπὶ τοῦ ἁγιω(τάτου) Θεολώρου ἡμῶν μητρ[οπολίτ(ου) (καὶ) ἀρχιεπισκ(όπου)] ἐψηφ(ώθη) οὗτος / ὁ ναὸς τοῦ ἁγίου προφήτου Ἠσαΐου ἐκ κα[ρποφορίας καὶ σπο]υλῆς / Σαμμασαίου θεοφ(ιλεστάτου) πρ(εσβυτέρου) (καὶ) Γεωργίου αὐτ[οῦ υἱοῦ(?) κα]ὶ Ἰωάννου / Μακαρ(ίου) ὑπὲρ μνείας (καὶ) ἀναπαύσε⟨ω⟩ς τῶ[ν γονέων καὶ λιαφερόντ]ων ἐν μηνὶ / Δύστρῳ χρ(όνοις) ὀγλόης ἰνλ(ικτιῶνος) τοῦ [. . . ἔτους τῆ]ς ἐπαρχίας.

'In the time of the most holy Theodore our metropolitan [and archbishop] was paved with mosaic this church of the holy prophet Isaias from the gift and owing to the zeal of Sammasaeus the most God-beloved priest, George his [son?] and John (son of) Macarius, in memory and for the repose [of their parents and family] in the month Dystrus in the time of the eighth indiction of the . . . year of the province' (March of A.D. 574/5 or 589/90?).[2]

[1] The twelfth indiction ran from September 593 to August 594; the year 489 of Bostra began in March 594.

[2] We know from Nos. 4 and 5 that Polyeuctus was archbishop at least from 594 to 620. It seems more probable

Conclusions

Two conclusions of general interest emerge from this group of inscriptions: (1) They supply us with two new names of archbishops of Bostra. These fill part of a gap in the existing list between Simon, a contemporary of Anastasius I, patriarch of Antioch (559–70 and 593–9), and one Stephen, who wrote in the eighth century.[1] Simon must have been followed in the early seventies of the sixth century by Theodore, who was succeeded near the end of the century by Polyeuctus. The long episcopate of the latter lasted into the twenties of the seventh century. (2) Another conclusion concerns the territorial boundaries of the region. The fact that the highest dignitary referred to is the archbishop (of Bostra, there being no other archiepiscopal seat in the vicinity) shows that the area of Riḥāb belonged to the Provincia Arabia.[2] The territory of Gerasa, the proximate city, must have, therefore, ended somewhere between Riḥāb and the quarries of Samta,[3] excluding the former.

We do not know the ancient name of Riḥāb. It has been identified with the Biblical Beth-Rehob.[4] Although neither Eusebius nor any other ancient author happens to mention it, it is quite possible that the ancient name survived into later periods. In any case this little and practically unknown locality had, at the end of the Byzantine period at least four churches and one monastery. The oldest church was that of the Prophet Isaiah.[5] Inscription No. 6 speaks of paving it but not of its erection, i.e. it must have been built before either 574 or 589. Next came the church of St. Basil the martyr, erected in 594 (Nos. 3–4). The Basil referred to can be hardly any other but that of Ancyra, who died in 362.[6] Ten years later, in February 604, was completed the church of the Holy Wisdom, apparently together with a monastery; in any case it was a monastery church (Nos. 1–2). The last church of which we know was that of St. Stephen (the protomartyr) (No. 5). Its construction took place under Persian rule (614–27), but there is nothing strange in that. It is well known that after an initial period of hostility the Persians definitely favoured the Christian population in the conquered provinces in preference to the remaining non-Christian communities.

If we consider the donors commemorated, we note that all this church building was the result of local zeal; indeed in No. 5 the fact is stressed that the donors built a church ἐν τῷ πατρικῶ αὐτῶν τόπῳ. Perhaps they were returned emigrants. The local clergy and

to assign the inscription to one of the eighth indictions preceding 594, i.e. 574/5 or 589/90, as indicated above. This makes Theodore the immediate predecessor of Polyeuctus.

[1] *Dictionnaire d'histoire et de géographie ecclésiastiques*, ed. Baudrillart, Vol. IX, Paris, 1937, col. 1404, and Le Quien, *Oriens christianus*, Vol. II, col. 858. Another archbishop of the same period, one Dositheus, cannot be dated exactly.

[2] For a similar situation as regards Tyre and Acre, cf. *JPOS*, Vol. XIV, p. 57 f.

[3] Abel, *Géographie de la Palestine*, I, p. 186; cf. *Bulletin JPES*, Vol. XI, p. 7.

[4] 2 Sam. x. 6 and 1 Sam. xiv. 47 (LXX).

[5] There are several other churches devoted to Biblical personages, especially in Trans-Jordan, e.g. the church of Elias at Madaba, of Lot at Kh. Mukhaiyat, of Moses on Mt. Nebo, &c. (cf. Horning in *ZDPV*, 1909, p. 138 f.; Lemaire in *RB*, 1934, pp. 394–401; Sallers, *The Memorial of Moses on Mt. Nebo*, Jerusalem, 1941).

[6] *Dict. d'hist. et de géogr. eccl.*, Vol. VI, col. 1074. One might consider Basil the Great, bishop of Caesarea; but although described as 'martyr' by Gregory of Nazianzus (Or. XX, 371, 372) he was hardly that in a technical sense.

minor orders naturally took the lead: the deacon John in the building of St. Sophia, the deaconess Zoe in that of St. Basil, Sergius the priest and the sacristan John in that of St. Stephen, Sammasaeus the priest in that of Isaiah the Prophet. No church was built from one donation; the church of St. Basil is due to six persons, those of Isaiah, St. Sophia, and St. Stephen to three each. Apparently the community comprised several well-to-do persons, but no one was very rich. The provincial hierarchy seems to have taken a benevolent interest in the church building. The ruling archbishop of Bostra is the greatest personage mentioned and looms big in all inscriptions. The civil authorities are not mentioned at all.

The only indication as to who was in charge of the building activities is given in the case of St. Sophia, where the three 'monks and sacristans' appear to have been in charge of the construction. The existence of a deaconess in the sixth century is paralleled by several contemporary inscriptions found at Jerusalem;[1] the fact that Zoe is mentioned before the male donors indicates a certain degree of standing, i.e. wealth.

The formulas used follow the usual sober style of church inscriptions in northern Palestine.[2] There is no specific doctrinal emphasis: the consubstantiality of the Trinity had been an established dogma since the decline of Arianism in the fifth century, while the later Christological controversies find no reflection here.

Out of the twenty-two personal names mentioned in these inscriptions, only four are noteworthy, the rest being of the ordinary Byzantine type. The uncommon names are:

Rison (No. 1). To judge from similar forms: Ρασουα, Ρεσαια,[3] &c., this is derived from the root *Rṣn*, the Biblical Rezin.[4]

Badagius (Nos. 3 and 4). This rare name occurs once more in an inscription of A.D. 468 at Umm er Rumman.[5] Its root is unknown.

John *Karkusos* (No. 5) = *Qrqš*.[6]

Sammasaeus (No. 6) = *Šmš*.[7]

It should be noted that whenever there is a filiation, the Semitic name of the father is followed by the Greek names of his descendants.

The era is the common one of Bostra; in the earliest inscription (No. 6) the Macedonian month name is used, in all others the Latin one. This corresponds to the development observed elsewhere in Palestine.

M. Avi-Yonah.

[1] Cabrol-Leclercq, *Dict. d'archéol. chrét.*, Vol. IV, 1, cols. 732–3.
[2] Cf. *QDAP*, Vol. III, p. 102.
[3] Wuthnow, *Sem. Menschennamen*, Leipzig, 1930, p. 167.
[4] Reṣīn (AV Rezin, LXX Ρασων) 2 R, xv, 37, &c.
[5] Waddington, *Inscr.*, No. 2056.
[6] Wuthnow, p. 62.
[7] *Ibid.*, p. 104.

OBITUARY

ELISABETH HENSCHEL-SIMON, Assistant-Keeper of the Palestine Archaeological Museum since 1936, died on 23 January 1946.

Mrs. Henschel-Simon was formerly on the staff of the Verwaltung der Staatlichen Schlösser und Gärten, Berlin. She joined the Department as Cataloguer in 1935 and was appointed Assistant-Keeper in the following year.

Her work lay particularly in the operational and exhibition side of the Museum, during the period in which the collections were being arranged in the new quarters and the first exhibitions prepared. In this work she combined an immense industry with a keen appreciation of the technical and aesthetic requirements of a modern museum. Her mind was critical and stoical, her character self-effacing; a more loyal colleague could not be wished for.

Mrs. H.-Simon was an occasional contributor to the *Quarterly* and to museum publications concerning antiquities of special interest or specially exhibited in the Galleries.

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